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ADDITIONS AND CORRECTIONS.

Page 43. The relics found by Col. Dundas in the excavations at Tapock have been presented to the Museum of the Antiquaries of Scotland, and they are more fully enumerated in their Proceedings, vol. vi. p. 111.

Page 49, line 7, for "neck" read "head."

Page 71. *Cancel* remark of Mr. W. Bernhard Smith as to the use of military rifles.

Page 75. The oriental arms described as exhibited by Mr. J. Henderson, were exhibited by Mr. W. J. Bernhard Smith.

Corrected list of the references in M. De Salis's *Paper on Roman Coins Struck in Britain*, pp. 149—160.

Page 155, *read* Plate II., *instead of*	. . . . .	Plate I.
	No. 3	No. 2
Page 156	No. 4	No. 3
	No. 5 (a)	No. 4
	No. 5 (c)	No. 6
	No. 2, in the paragraph beginning with "Besides these coins," *after* the words "GENIO POPVLI ROMANI."	
	No. 6 *instead of*	No. 7
	No. 7	No. 9
Page 157	No. 9	No. 10
	No. 10	No. 11
	No. 11	No. 12
	No. 11	No. 13
	No. 12	No. 14
	No. 13 and Plate I. No. 1	No. 15 and Plate II. No. 1.
	No. 14	No. 2
	No. 2	No. 3
	No. 3	No. 4
Page 158	*No. 4	No. 5
	*Nos. 5, 6, 7	No. 6
	*Nos. 8, 9	No. 7
	No. 10	No. 8
	No. 11	No. 9
	No. 11	No. 10
	No. 12	No. 11
	No. 13	No. 12
	No. 14	No. 13
Page 159	No. 15	No. 14
Page 160	No. 16	No. 15
	No. 17	No. 16

* Nos. 4, 5, 6, 7, 8, 9 are reverses common to Constantine, Crispus, and Constantine jun.

Page 177, line 26, for "Twigood" read "Twiwood."

Page 258. In foot note. "The estimation *is* which" should be "*in* which."

Page 265. The matrix of the fifteenth century, supposed to have been the seal of Burton Lazars, was in the possession of the late Major Moor, having been dug up near his residence, Bealing, Suffolk. See his Oriental Fragments, London, 1834, pp. 76, 79, 481; it is there engraved, pl. iv. The device of this seal, of pointed-oval form, is an episcopal figure, with a crosier in the left hand, the right upraised; above is a canopy of tabernacle work; legend ✠ Sigillū fraternitat' sc'i lazari Ierlm̄ i Anglia. This seal is more correctly figured, Archæologia, vol. xviii. p. 425. See also Taylor, Index Monasticus, p. 36. There exist two other matrices, almost identical in design; of one of them an impression was given to Caley by the Rev. G. Gorham; the second, of much better workmanship, was in possession of Mr. Walrond, Dulford, Devon. The inscription is the same in each instance, slightly varied in the contractions only.

Page 286, line 21, for "Davis Gibbons" read "Davies Gilbert."

The Archaeological Journal.

MARCH, 1867.

INAUGURAL DISCOURSE,

Delivered in the Section of General Antiquities, at the Annual Meeting of the Archæological Institute in London, July, 1866,

BY SAMUEL BIRCH, ESQ., LL.D., F.S.A.

THE section, over which I have the honour to preside, is so extensive in its range that I approach the subjects which fall under its consideration with diffidence; for although primæval antiquities, history, and architecture are specially represented elsewhere, yet the subject of general antiquities extends all over the civilised portions of the globe, both in the Old and New World, and embraces all the smaller remains of the handiwork of man from England to China in the East, and to Mexico in the distant West; in a word, all the vestiges of Eastern and Western civilisation. By archæology is understood the study of the monuments of antiquity of all times and places, and it divides itself into several branches, as palæography, or the study of the forms of letters and inscriptions; epigraphy, or the consideration of their contents; and the study of figured antiquity, or of the shapes and meaning of sculpture, painting and symbolical representations. The main objects of archæology are to preserve from destruction the precious relics of the past, and to aid in the development and discovery of historic truths. History itself is dependent on the existence of contemporary monuments, and the annals of some nations, as the Egyptians, Assyrians, Phœnicians and other Semitic races are preserved on monuments alone; their other literature having entirely perished in the wreck of ages. Archæology also aids in the formation and cultivation of public taste by directing it to the selection of the good and

useful which has escaped the ravages of time, and to the employment of such portions as are capable of being so used in the wants of modern civilisation. All, however, that is old is neither good as to its art nor useful for application, but a judicious selection is no slight element in the cultivation of the beautiful in art, and of the useful in manufactures. Still more than all this, archæology strives to diffuse, by writing and engraving, the knowledge of what has come to light, and to preserve the recollection and the very image of remains that would otherwise be lost. This object has particularly been had in view by the Archæological Institute, which has nobly fulfilled its duty to science in this respect, as it has also done by its meetings, which awaken an interest in the diffusion of archæological knowledge and the preservation of ancient remains. After the fall of the Roman Empire the study of archæology lay dormant till the revival of the arts and literature in Europe, when the discovery of objects of ancient art gave a new impulse to sculpture, painting and architecture; and archæology was discovered to be most important for understanding of the meaning and application of those arts. At Florence the De' Medici collected such remains as they could obtain, and which had escaped the destruction of the Goth, or were found amid the ashes of Western civilisation. Their example was followed by the rest of Europe; but archæology was conducted without much critical or accurate knowledge till the two last centuries, when Winckelmann and Visconti created the school of students who combined a careful examination of ancient remains with the study of Greek and Roman literature. The study of topography indeed, a branch of archæology, flourished at an earlier date, but it is only in the last century that the improvement of engraving has enabled copies of monuments sufficiently accurate for study and comparison to be produced. The museums of Europe are the arsenals of archæology, and from them the student draws materials for his study. In them is preserved all that has escaped the destroying process of time. Yet, large and important as these institutions are, and amply as they seem to be stored with objects of all kinds and ages, it may be considered how little has really been preserved when it is remembered that all the museums of Europe combined could not arm a Roman company for

battle or equip a pair of gladiators for their fatal fray. The museum of this metropolis takes the very highest rank amidst these arsenals and treasuries of antiquity, and nowhere will the student of archæology find at his disposal so many remains, not only of Greek and Roman art, but of Egyptian, Assyrian and other nations; nowhere else can he observe so closely and accurately the progress of ancient civilisation.

But I must pass from this topic, however alluring, to tell you something of the progress and condition of archæology, and of some of the principal discoveries which have been lately made, discoveries of which, I believe, you will like to hear. I shall begin with those relating to Egypt. A wonderful advance in the knowledge of Egyptian monuments has taken place in Europe during the last fifty years, and in hieroglyphical interpretation during the last twenty years. This has been accomplished by the labours of MM. de Rougé, Chabas and Devéria, in France; MM. Lepsius, Brugsch, and Duemichen, in Prussia; Mr. Goodwin, Dr. Hincks, Mr. le Page Renouf and others in this country. The structure of the language, the meaning of the words and texts are now thoroughly understood, and the contents of all documents can be interpreted. For not only has the easier and more objective portion of the language been discovered, but even the grammatical forms and particles involving a much greater progress. Egypt may, in fact, be considered to be subdued and fallen under the arms of science,—a conquest which has been effected by the application of induction and logic to the interpretation of extinct languages, which have left behind them neither traditional grammars nor dictionaries to facilitate the progress of the inquirer.

You have, no doubt, lately heard of the discovery of a bilingual tablet of calcareous stone, nearly 8 ft. high, at San or the ancient Tanis, by Professor Lepsius, on the occasion of his visit to that spot. His letter on the subject, dated the 21st April, addressed to me, was communicated to the Athenæum. Since then twenty lines of the Greek, and as many of the hieroglyphic version, have been published in the Zeitschrift fur Äegyptische Sprache und Alterthumskunde, at Berlin. It is like the Rosetta stone in its general purport, for it is a decree of the priests assembled in a synod at

Canopus, and is dated the ninth year of Ptolemy Euergetes I., on the seventh day of the Macedonian month Apellæus, showing it to have been drawn up from the Greek original. Its date is B.C. 238, or about fifty years older than the Rosetta stone, and its object nearly the same. It records the benefits conferred by the monarch Euergetes I. on Egypt, the priests and the people, the restoration of the statues taken away from Egypt by the Persians, and the alleviation of the misfortune of a deficient Nile and impending famine by the generosity of Ptolemy and his consort Berenice. In one point it is of the highest interest to the chronology of Egypt. It mentions that the priests, aware of the disturbance of the due celebration of the festivals, by which those which ought to have been held in the summer fell in the winter, decreed the institution of a leap year by the addition of a day to be added every fourth year to the five *epagomenæ* or intercalary days. This day was to be dedicated to the festival of the monarch, and the year thus created anticipated the so-called Julian year of the reformed calendar of Sosigenes, B.C. 45, by nearly two centuries.

When this tablet was discovered, Egyptology, or the science of Egyptian interpretation, was said to be put upon its trial, as the Greek inscription on it would either confirm or contradict the results of recent researches, and Egyptology comes out triumphant from that trial. Not only have the proper names of Cleopatra and Berenice been found, which were considered by some sceptics to be a missing link in the chain of evidence, but (I speak from a careful examination of the published portions) the body of the text, words, grammatical forms and inflections agree with what had been predetermined by Egyptologists, and only some trivial modifications of the sense of a few words will result from the discovery of this tablet. The value, in fact, of these bilingual tablets to science, in its present state, is not so great as might be supposed. They have a greater value as replies to the attacks and doubts which have prevailed against the truth of hieroglyphical discovery. Besides the tablet of Sau, some other monuments of great interest have been lately exhumed in ancient Egypt. One is a new tablet of Abydos. The visitor to the British Museum will recollect the old tablet of Abydos placed on the east wall of the northern gallery. Now what the Rosetta stone was to Egyptian philology, the Abydos tablet was to the

chronology of Egypt,—the key, the answer to the riddle. Last year, M. Duemichen discovered at Abydos, on a wall of the temple which had been laid bare by directions of M. Mariette, a list of seventy-six royal names, commencing with Menes, the first monarch of Egypt, and ending with Sethos I. of the nineteenth dynasty. For the first six dynasties the list is consecutive, after that it is more difficult to identify with Manetho. The rest of the series coincides with that of the table of the British Museum. M. Mariette had previously discovered at Sakkarah another series of royal names, inscribed on the walls of a private tomb. These extend over the same space of time, but are by no means arranged in so regular a sequence, their order being much transposed; and consequently this list of Sakkarah cannot have so much weight in the consideration of the chronology of the period.

I must here call your attention to the difference in historical value of public and private monuments. The public monuments of a country are made under official supervision, and are subject to public criticism. They are, therefore, more correct and trustworthy than those made for individuals; which were liable to the same errors, changes, and caprices in remote times, as at the present day. In reference, therefore, to historical interest, the tablet of Abydos must, from this consideration alone, rank higher than the tomb of Sakkarah. As the most important point about Egypt is its chronology, its helping to determine the relative age of civilised man on earth, these tablets have a powerful interest, and their contents and bearing will have to be weighed by the two rival schools of chronology—the long chronologist, which expands the period of the Egyptian dynasties to a high antiquity; the short chronologist, which would contract and make them synchronise into other systems.

Leaving Egyptian archæology, I will now proceed to speak of the discoveries and progress made in the interpretation of the Assyrian, Babylonian, and Persian inscriptions, which have also yielded to the inexorable force of philological logic. In the year 1800, Groterfend, in Hanover, made the first attempt at the decipherment of the cuneiform character, by a beautiful and intricate chain of reasoning. The study languished, however, for want of texts, although the

Persian inscriptions attracted the attention of Lassen and Burnouf, till Sir H. Rawlinson made so great an advance that his interpretation of the monument of Darius I. at Behistoun may be considered as fresh discovery. Here your attention should be directed to the fact that the power of interpretation depends in a great degree on the supply of monuments and texts accessible to the interpreter. Thus it has been reproached to the modern school of archæology that it professes to make out the remoter monuments of Egypt and Assyria, while it is unable to solve the inscriptions of Etruria, which flourished at a period more recent, and was connected with races and languages better known. But the paucity and poverty of Etruscan inscriptions, which are mere repetitions of sepulchral formulæ, and a system of writing, like the Latin monuments, in contractions, have impeded the progress of the inquirers.

But to return to Assyria. The discoveries of Botta in 1842 and of Layard in 1845, and the subsequent excavation by Loftus, Rassam, and Rawlinson, of the palaces of Nimroud, Khorsabad, Kouyunjik, and other localities, built by Sargon, Ashur-bani-pal, Ashur-izir-pal, and Sennacherib, are familiar to you by the archæological trophies which adorn the Museum. To Mr. Layard this country and the world are under the deepest obligations for the impulse given to Assyrian philology and archæology, by initiating the discovery of such treasures. While in Egypt the passive climate did not destroy the monuments, in Assyria the circumstance of a nation using by preference baked clay instead of parchment and papyrus to write upon, has preserved its annals and its literature. Thousands of fragments of terra cotta tablets, deeds, annals, petitions, from the archives of Kouyunjik, now in the Museum, enable the decipherer to discover their hidden meaning by the opportunity of comparison which they afford to his sagacity. They are inscribed in cuneiform characters, a style of writing in use from the earliest origin of the Babylonian kingdom till the age of the Seleucidæ, or the second century B.C. To Sir Henry Rawlinson, Dr. Hincks, Mr. Fox Talbot, in England, and M. Oppert in France, we are indebted for a knowledge of their contents. This cuneiform writing was used for several languages, the oldest of which, the so-called Accadian, is referable to the Turanian family,

while the Babylonian and Assyrian are allied to the Semitic, the Median to the Turanian, and the Persian to the Zend. It is impossible here to detail to you the varieties of these inscriptions, relating as they do to history, science, language, and laws. Amongst them may be particularly mentioned the obelisk of Shalmaneser, on which is represented the tribute of Jehu ; and the tablet of the same monarch discovered at Kurkh, near the head waters of the Tigris, from the description of it on a cuneiform tablet, interpreted by Sir H. Rawlinson, on which is found the name of Ahab. Not less important are the historical cylinder, prism, and inscriptions from Khorsabad recording the campaign of Sennacherib against Judæa. A consideration of such monuments is essential to an understanding of the contemporaneous history of the Old Testament, and their language, affiliated to the Hebrew and Chaldee, is the most important of all contributions to Semitic palæography and philology.

Next in point of time to these two great branches of the Semitic and Hamitic families are the Phœnicians, through whom the civilisation of the East passed to the Greeks. The remains of the Phœnicians are to be sought for rather amongst those of other nations than upon their own soil. For the haughty monarchs of Babylon and Nineveh they worked in bronze and ivory, and recent examinations have discovered Phœnician inscriptions on the bronze vessels and ivory fragments of Nimroud. The same language has been discovered on the clay cuneiform tablets of Kouyunjik, elevating the antiquity of the writing above the age hitherto assigned to it from the inscriptions found on Asiatic or European sites, or the Phœnician coins of Syria, Asia Minor, and Greece. Their galleys ploughed the purple waters of the Mediterranean, descended to the Egyptian Naucratis, threaded the isles of the Ægean, trafficked in the ports of Spain, and probably passed Gibraltar. They carried their wares, principally ivory, glass, and silver plate, to the refined and curious Greek, to the voluptuous and indolent Etruscan. Elegant vases of glass for the toilets of the beauties of the past, transported by their trade from their own furnaces, or those of Egypt, are found in the sepulchres of the Greek isles, in Greece itself, and Italy. In their ancient settlements in Rhodes and Sardinia, numerous remains of their art in gold, porcelain, and glass have been discovered

of late years. To the poor and distant Britons they sold beads and trash-goods, called "rôpé," or rubbish, by Strabo, in exchange for the tin and other products of our isle, and recently glass beads of opaque and veined glass, resembling those found in the tumuli of the Celts, have been brought from Tyre itself. Not less important than Phœnician art was the system of writing which they invented. The Phœnicians were a commercial and practical people, and discarding the cumbrous modes of writing in use by the Egyptians and Assyrians, they adopted a simple alphabet of a few letters, which represented all the sounds required. But, like all Semitic nations, they omitted the vowels, leaving a certain ambiguity and difficulty; and the perfection of the alphabet was reserved for the Greeks, who, by the introduction of the vowels, brought it to the state of completeness it possesses at the present day. The metrical system of the Phœnicians was also of great importance, and their weights have been found in the palaces of Nimroud and the tombs of the Troad.* The study of their inscriptions and palæography continues to advance, and an account of Semitic palæography will be given on occasion of the present meeting by Mr. Deutsch.

Semitic antiquities have received of late considerable attention from the investigations of M. Renan in Syria, the Count de Vogué and Mr. Waddington in the Hauran. The subject of Hebrew antiquities has also excited great interest. The researches of the Duc de Luynes in Palestine, and M. de Saulcy at Jerusalem, have been succeeded by those of the Palestine Exploration Fund. The inscriptions found in Palestine throw considerable light on the disputed age of the square Hebrew character; unfortunately, they are not older than the third century of our era. It is, however, to be hoped that future excavations on the site of Jerusalem may help to settle the disputed points of the topography of that city, and the actual position of the Temple and the Holy Sepulchre. Of other Semitic antiquities, the bronze plates with Himyaritic inscriptions found in Southern Arabia, and presented by General Coghlan to the Museum, and the century of Punic inscriptions discovered by the Rev. N. Davis at Carthage, all of which

* The principal monument of this people discovered of late years is the sarcophagus of Ashmunaser, found at Cyprus.

have been published, have added considerably to our knowledge of Semitic philology, as the excavations of M. Beulé on the site of the Byrsa or Citadel of Carthage, have to the topography of that city. Still more considerable have been the discoveries in Greece and Asia Minor; the excavations of Mr. Newton at Halicarnassus having exhumed the Mausoleum, and added to the examples of Greek art a brilliant series of sculptures and reliefs of the later Athenian school, which flourished about 350 B.C. The more archaic sculptures of the Hiera Hodos, or Sacred Way, at Branchidœ, near Miletus, removed by Mr. Newton to England, have formed an important contribution to the known examples of Ionic sculpture, as the inscriptions from the same site have done to Greek palæography. Important examples of antiquities have been procured at the Rhodian Camirus, by MM. Salzmann and Biliotti, consisting of jewellery, vases, and other objects, many of which prove the early settlement of the Phœnicians on the spot, and illustrate the wares they carried to the island. Amongst them may be particularly mentioned a Greek vase of great beauty, of the style of the decadence, representing the well-known subject of Peleus and Thetis. It is not necessary to dwell on the discovery by Lieutenants Smith and Porcher of five temples in the Cyrenaica, the sculptures of which, principally of the age of the Antonines, have enriched the galleries of Roman art, but still more recent researches by Mr. Dennis, in the same locality, have discovered more vases of the class of Panathenaic amphoræ, one with the name of the Athenian archer Polyzelos, B.C. 368, contemporary of Alexander the Great. Another of these vases has the name of Kittos, also Athenian, that of the potter who made it, showing that they were imported from Athens to the coast of Africa, and not imitated there from Athenian originals.

The predecessors of the Romans in the civilisation of Central Italy were the Etruscans, whose costume and type bear an oriental impress, and exhibit some peculiarities of Asiatic art. They chiefly excelled in mechanical execution, and were celebrated in antiquity for their works in bronze, a remarkable example of which, an archaic Aphrodite, has been discovered in Southern Italy. Rome, it will be remembered, previous to her conquest of Greece, obtained the statues of her gods, the *signa Tuscanica*, from Etruria.

Without, however, pronouncing whether the Etruscans or Rasenæ descended from the Rhœtian Alps, or landed as colonists on Italian shores, a careful examination of their language, which is written in Greek characters with modified forms, must bring conviction to the mind that it was a declined and inflected tongue, resembling in its general structure the Oscan, Latin, and other dialects of Central Italy. Such at least is its contribution to that historical problem which future investigations must eliminate. For the present the excavations in Etruria have ceased, and no great additions have been made to the important examples of Etruscan remains. Enough has been found to show in how great a degree the Romans were indebted to the Etruscans for their principles of art. Few examples of Roman art are as old as the days of the Republic; the greater portion belong to the period of the Empire. Roman antiquities have an especial claim upon our attention, as they are extensively diffused all over Britain. The evidences of Roman art are found scattered throughout western Europe, and are constantly appealed to as proofs for defining the topography of the former Roman provinces, and the extent of the empire. The most common, the best known of the smaller objects of Roman art is the red pottery, or so-called Samian ware, and is familiar to us all. This was preceded by the red ware of Arezzo or Arretium, the Aretine ware, and some of the red ware found in Britain appears to have come from the potteries of Capua, Cuma, and other Italian cities. The place of fabric of the red ware is, however, as yet undetermined, although the name of Gaulish, and other barbarian potters, found upon it, go far to prove that its fabric may have been in ancient Gaul and Germany. It is the connecting link in art between the beautiful vases of Greece, which at their close substituted reliefs for paintings, and the local potteries of the Roman provinces, and was produced from the first to the third century of our era. Besides this ware there were local kilns in this country of the Anglo-Roman wares of Castor, Upchurch, and Crockhill. The legionary tiles, excellent specimens of which, belonging to the second and ninth Legions are in the Museum at York, and others of different legions, discovered in Britain, enable us to trace the stations of the Empire. On a recent occasion the Congress of the Institute was inaugurated in the Guildhall, in the centre of

the Roman London, on a spot formerly a British village, afterwards a Roman city, and now the metropolis of a mighty empire. This site was near that of the palace of the prætor, as appears from the tiles discovered near the spot. There, in the old city of London, at the depth of 18 ft. are found, from time to time, Roman mosaics, pottery, arms and implements; a few feet nearer the surface lie the remains of our Anglo-Saxon ancestors, while the pavement of 1666, two centuries back, is 6 ft. below the level of the present streets.

I shall not enter upon the subject of British art, nor upon that of mediæval art, its diptychs, ivories, illuminations, enamels, seals and gems. These subjects are constantly brought under the notice of the Institute, and the state and progress of our knowledge upon them is well known from the memoirs which appear in the Journal of the Institute. So, too, the subject of numismatics, which would require not one but several lectures to explain, for it is a branch of archæology which has been more minutely studied than any, and it is impossible, on the present occasion, to make more than a few remarks. Yet I cannot forbear from calling your attention to the fact that it is desirable more attention should be paid than has been hitherto done to coins considered in reference to the monetary systems to which they belong. The types of coins have been minutely studied in reference to their subjective interest to history and mythology. For example, the numerous small brass of the latter days of the Empire become of greater interest, when it is known that they are the washed and copper *denarii* which superseded silver, ceasing to be current after the reign of Gallienus. The Roman treasury issued them in its payments, or rather promises to pay, for they are the prototypes of a paper currency, but would only receive gold in payment of the taxes. They circulated at their nominal value till the reign of Aurelian, who in his grand monetary reform or revolution, for thousands of moneyers were killed by his legions in the streets of Rome in consequence, would only take them at a depreciated value, or rather reduced them to their intrinsic value of 525 to the *aureus* or gold coin. In the subsequent alteration of Diocletian, a larger brass coin called the *follis*, equal to four *denarii*, appears along with the copper *denarii* and the still smaller *assaria*. Mr. J. F. de Salis, than whom no one is better acquainted

with the coins of the latter days of the Roman Empire, will give you a memoir upon the mint of Roman London, commencing in the reign of Carausius and terminating with that of Magnus Maximus, in which some of the numismatic points I have referred to will be treated at a greater length.

ANCIENT INTERMENTS AND SEPULCHRAL URNS FOUND IN ANGLESEY AND NORTH WALES, WITH NOTES ON EXAMPLES IN SOME OTHER LOCALITIES.

From notices communicated by the Hon. WILLIAM OWEN STANLEY, M.P.

ON a former occasion, in describing a remarkable sepulchral deposit with cinerary urns brought to light at Porth Dafarch, on the western shore of Holyhead Island, in 1848, the attention of archæologists, of those more especially who devote their researches to vestiges of ancient races in the Principality, was invited to the deficiency of information recorded with sufficient precision regarding interments of the earlier ages.[1] During the interval of nearly twenty years that has elapsed since those observations were made, some progress has been gained in this particular department of antiquarian investigation; a fresh impulse has been given through the annual gatherings held in various districts by the Cambrian Archæological Association, and the constant record in their Transactions, of discoveries that have been made, has essentially contributed to stimulate greater energy and precision in the study of national antiquities. But much remains to be done. We have indeed emerged from that dim age of scanty information when the Nestor of Cambrian archæology, Pennant, was compelled, in his remarks on ancient interments and urn burials, to admit—"I cannot establish any criterion by which a judgment may be made of the people to whom the different species of urns and tumuli belonged, whether they are British, Roman, Saxon, or Danish."[2] We are still, however, in uncertainty in regard to various details connected with the fictile vessels of the earliest periods, the distinctive character of their

[1] Memoir, by the Hon. W. O. Stanley, on a Sepulchral Deposit in Holyhead Island; Archæol. Journal, vol. vi. p. 226.

[2] Pennant, Tour in Wales, vol i. p. 383; where a valuable summary of antiquarian knowledge at that period (1778) in regard to the rites and relics of ancient interments may be found. Several cinerary urns found in burial-mounds in the parish of Llanarmon, Flintshire, are noticed; they had been placed inverted on flat pieces of stone, a second stone being also placed over each urn for its protection in the mound.

fashion, and the uses to which, as some are of opinion, these curious vessels, now known to us only in their application to mortuary purposes, may have been originally destined, in the daily life of ancient occupants of these Islands.

Such have been the considerations that have seemed to give particular interest to some discoveries of sepulchral deposits in Anglesey and North Wales, either recently brought to light or hitherto unrecorded. It is hoped that the following notices may prove acceptable as supplementary to those formerly brought before the Archæological Institute in the memoir that has been cited, describing the very curious deposit at Porth Dafarch.

The general classification of burial-urns of the earlier periods, as proposed by Sir Richard Colt Hoare and other writers, although doubtless familiar to many readers of this Journal, may here be briefly noticed. A very useful summary of our knowledge of relics of this description, accompanied by numerous illustrations, has also been given by the late Mr. Bateman, in his record of the careful investigations of barrows and urn-burials in Derbyshire and other parts of central England.[3] The vessels exhumed from the so-called Celtic tumuli may be conveniently arranged, as he has pointed out, under the following classes.

1. Cinerary or sepulchral urns, such as have either contained or have been inverted over calcined bones. They vary much in dimensions, material, and ornamentation. Those that are supposed, from their being accompanied by weapons or other objects of flint, to be the most ancient, are formed of clay mixed with small pebbles or broken gravel. They were wrought by hand alone, and the process of firing them was very imperfect. The color of the surface is dark brown; the interior, as appears by any fracture, is black. These urns measure in height from about 10 in. to 18 in.; the upper part is usually fashioned with an overhanging rim, measuring in many examples more than a third of the entire height of the vessel, and it is decorated by impressions apparently produced by some twisted cord, of skin possibly, or of vegetable fibre, with scored and other patterns also in which the herring-bone prevails in various combinations, frequently presenting a reticulated appearance. The occur-

[3] Bateman, Ten Years' Diggings, p. 279.

rence of any object of bronze with urns of this class is extremely rare.

2. Incense cups or thuribles; a designation commonly adopted, although the real purpose of such small vessels is doubtful. They occur with calcined bones, and frequently are found deposited within the urns of the first class. In dimensions they vary from 1½ in. to about 3 in. in height; the color is mostly lighter than that of the large urns, the paste, which is moreover less mixed with pebbles or sand, being more perfectly fired. They have in many instances two perforations at the side, and, more rarely, two also at the opposite side, doubtless for suspension. They likewise are fashioned with open-work or with long narrow slits; the ornament is impressed or incised, as on the larger urns. There is reason to suppose, as the late Mr. Bateman remarks, that they do not accompany the earliest interments.

3. Small vessels, probably for food, greatly varying in fashion and ornament; they occur usually with unburnt remains, and were placed near the head or at the feet, but not unfrequently with incinerated bones—not, however, containing them. The dimensions are from 4½ in. to 5 in. in height; the mouth usually is wide, the foot small. It is difficult to determine the age of these vessels, which frequently are rude and almost devoid of ornament, whilst others are well wrought and elaborately decorated with impressed markings and herring-bone patterns.

4. Drinking cups, as designated by Sir Richard Colt Hoare, doubtless in true accordance with their intention. These are highly ornamented vessels of fine clay well baked; the height about 6 in. to 9 in.; the form contracted in the middle and globular towards the foot; the color usually light reddish brown; the ornament, very elaborate and produced apparently by a toothed implement, is arranged in horizontal bands, chevrony patterns, triangular or lozengy compartments, &c., mostly covering the entire surface. These cups are usually found with unburnt remains, and had been placed near the shoulders; flint relics of superior workmanship occur with them. In a few instances a diminutive bronze awl has been found, but Mr. Bateman, in the course of the indefatigable researches by which his highly instructive collection at Youlgrave was formed, came to the conclusion that these beautiful vessels belong to a period when

metal was almost unknown. Three examples are known of a remarkable variation in form, having a small handle at the side; of these one was disinterred by Mr. Bateman near Pickering, Yorkshire;[4] another, found in the Isle of Ely, is figured in this Journal;[5] the third, obtained in Berkshire, is in the British Museum.

Of the first class of cinerary urns, namely those which may be regarded as earliest in date, a good example found in Carnarvonshire has recently been brought under the notice of the Institute by the obliging permission of Mr. Turner, of Carnarvon, in whose possession it is preserved. We are indebted to Captain Turner, his son, for the following particulars regarding the discovery. The urn was found a few years ago near Festiniog, at the side of the ancient way known as the *Sarn Helen*, and about a mile distant from the Roman station *Heriri Mons*, the site of which is now known as Tomen y Mur.[6] At that spot, where entrenchments are to be seen and numerous Roman relics have been brought to light, the Roman road ascribed to the Empress Helena, consort of the Emperor Maximus in the fourth century, leading from Uriconium by Rutunium, and among the wild mountains of Wales to Caer Seiont near Carnarvon, and thence into Anglesey, crosses at right angles the Roman line of way from Muridunum (Caermarthen) by Llanio and Penalt in a straight course towards Conovium (Caer Rhun) on the Conway. To a considerable portion of this last mentioned way the name Sarn Helen is likewise given by popular tradition. These vestiges of Roman occupation are indicated by Mr. Wynn Williams in a map of Britannia Secunda that accompanies his memoir in the Archæologia Cambrensis.[7]

The urn in question, however (see woodcuts, fig. 1), belongs to a more distant period; it contained incinerated bones and ashes; amongst these were found three relics of unusual occurrence. These are, a bronze blade, fig. 2, supposed to have been a knife or small dagger, which in its perfect state measured about $2\frac{1}{2}$ in. in length, and $1\frac{1}{8}$ in. in breadth at the end where it was affixed by two rivets to a

[4] Figured in Ten Years' Diggings, p. 209.
[5] Archæol. Journ., vol. xix. p. 364.
[6] Sarn, in Welsh, signifies a paved road, or some kind of pavement. The urn was exhibited at the Monthly Meeting on March 1, *ult.*
[7] Arch. Camb., vol. vi. third series, p. 186. A considerable collection of pottery found at or near Heriri Mons was in possession of the late Mr. Lloyd, of Maentwrog.

Fig. 1.—Urn found near Tomen y Mur, Carnarvonshire, the Roman Heriri Mons. Height 13¼ inches, diameter at the mouth 11 inches.

In the possession of Thomas Turner, Esq., Carnarvon.

handle; an oval disc, apparently a broken pebble of flint, fig. 3, of brown color, the edge white or cream-colored; and a needle

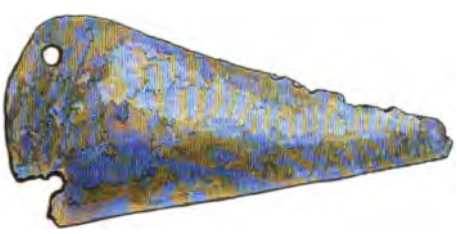


Fig. 2.

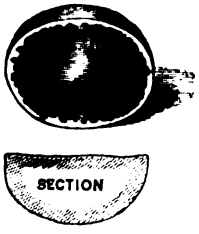


Fig. 3.

Bronze blade and relic of flint(?) found in an urn near Tomen y Mur. Original size.

of wood, fig. 4, measuring 6 in. in length, pierced with an eye like a bodkin. It has been supposed, possibly from this accompaniment of the deposit, that the remains may have been those

Fig 4.—Wooden needle found in an urn, Tomen y Mur, Carnarvonshire. Length 6 inches.

of a female; this, however, is perhaps questionable. It seems that in the urn-burials of the early occupants of the British Islands the burnt bones were collected from the ashes of the funereal fire and wrapped in some coarse tissue, fastened or held together by a pin, which in deposits of somewhat later times is of bronze. The wooden object here found in remarkable preservation may doubtless have appertained to the deceased person; the conjecture is, moreover, by no means inadmissible that it was placed with the ashes as a relic associated with daily life or industry.

This interesting urn, which had been much fractured, has been repaired under Mr. Ready's skilful care. The color is reddish brown; the dimensions are $13\frac{1}{2}$ in. in height; 11 in. in diameter at the mouth. The ornament seems to have been produced by impressing a twisted thong or sinew, possibly a twisted rush or some vegetable fibre might thus be used.

To the same early period may be assigned the urn of large dimensions (about $13\frac{1}{2}$ in. in diameter) found in a mound at Porth Dafarch in 1848, as before mentioned. It was more elaborately decorated than the specimen in Mr. Turner's possession. It had been placed inverted on a slab of stone, and carefully protected by stones set edgeways to protect

the vessel from the weight of the surrounding soil. A small urn of elegant fashion was found within it.[8] Anglesey has supplied another memorable example of this class of cinerary vases—unequaled possibly in interest by any like discovery on record—the urn disinterred in 1813 in a cist on the banks of the Alaw, and regarded with some probability as having been the depository of the ashes of Bronwen the Fair, sister of Bran the father of Caractacus, and consort of the uncourteous Matholwch, an Irish prince, from whose insulting treatment she sought refuge in Mona.[9] The circumstances of the discovery at the spot still known traditionally as Ynys Bronwen, the Islet of Bronwen, agree in a remarkable manner with the mention of her obsequies in the Mabinogion, where we read that a square grave (the rude cist of flag-stones within the cairn) was made for Bronwen on the banks of the Alaw. The special interest of this relic is obvious, if the conclusion is accepted that the deposit was in fact that with which the tradition has been associated; in no other instance, as Sir R. C. Hoare observes, has the antiquary been able to determine to what personage or at what precise period the sepulchral mound was raised. The Urn of Bronwen, now preserved in the British Museum, is here figured.[1] See woodcut, fig. 5.

Another urn, an example more elaborately ornamented, with lines arranged in zigzag fashion around its upper part, deserves notice (fig. 6). It was found in Anglesey about ten years ago about five yards from the turnpike road towards Holyhead, at a spot opposite the Anglesey Arms, Menai Bridge. This urn, here engraved, measures in height 13¼ in., the diameter of the mouth is 11½ in., and that of the base 4 in.; the lip is beveled off inwards; the thickness of the sides is ⅜ of an inch. It contained burnt bones, and was surrounded by a little protecting wall of loose stones, with a flat slab placed on the top of the vessel. It

[8] These with other sepulchral urns found at the same place are figured, Arch. Journal, vol. vi., pp. 228-230.

[9] Ibid. See also the account related by Sir R. C. Hoare, Cambro-Briton, vol. ii. p. 71; Ancient Wilts, vol. ii. p. 112.

[1] Several other good examples of urns of the same class have occurred in the Principality. See in Fenton's Tour in Pembrokeshire one elaborately decorated with zigzag and chevrony patterns, pl. I. fig. 2, it was found in mounds near Fishguard, as related p. 581. An urn of very unusual fashion, described as in form "like a peg-top," is given, pl. II. fig. 5, described, p. 579, as found in a mound at Park y Och (Field of Lamentation). It was in a cist with burnt bones, inverted, and measured 18 in. in height, diameter at the mouth 13 in.

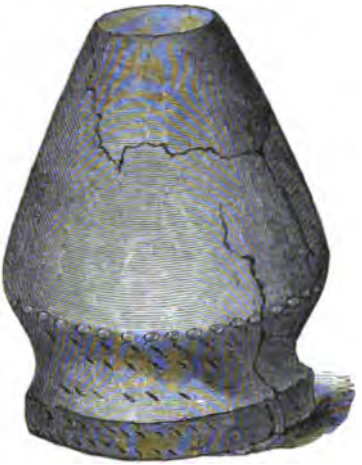


Fig. 5.—Urn, as supposed, of Bronwen, daughter of Llyr. Date of her death, about A.D. 50. Height 12 inches; diameter, at the mouth, 9 inches. British Museum.

Fig. 7.—Three Urns found at Mynydd Carn Goch, near Swansea. Height of the largest urn 10¾ inches. British Museum.

was in possession of Mr. Fricker, near Bangor. In 1857 a stone relic described as a celt or axe-head was found near

Fig. 6.—Urn found about 1855 near the Menai Bridge. Height 13¼ inches, diameter at the mouth 11½ inches.

the same spot; the material seemed to be limestone containing shells.

Of another urn, similar in its form and ornamentation to that last described, the fragments are in the Carnarvon Museum. They have been there deposited with other relics by Mr. Turner. This vessel, unfortunately broken, was brought to light in Anglesey, at Cadnant, about a mile from the Menai Bridge; the discovery occurred during the formation of the road to Beaumaris about 1825. The interment was found in the grounds at Cadnant; the fragments were given by the owner of that place to Mr. Turner's father.

By courteous permission of the Society of Antiquaries a beautiful group of urns found near the southern shores of the Principality is here placed before the reader, in illustration of the varied fashion of the interesting fictile relics of this early period. See woodcuts, fig. 7. They were found by Mr. J. T. Dillwyn Llewellyn, in a cairn on waste land, about five miles W.N.W. of Swansea, known as Mynydd Carn Goch—the Waste of the Red Cairn. The heap measured 90 ft. or upwards in diameter, and about 4 ft. in height; but some sixty years ago there was a pile of large

stones, that were removed to make a road. Within, at about 8 or 12 in. from the surface, there was a circle of stones nearly concentric with the circuit of the cairn. The largest of the three urns here figured, and which measures $10\frac{3}{4}$ in. in height, had apparently been deposited in the ground before the cairn was raised, having been placed below the original surface. After the vessel had been interred in the cavity formed to receive it, the space around the deposit seems to have been filled in with charcoal, supposed to be of fir-wood, and the whole was covered by a flat slab. The urn next in size, which measures about 7 in. in height, was found above the original level; it was placed inverted on a flat stone. The smallest, which measures about 2 in. in height by $3\frac{1}{2}$ in. in diameter, is pierced with small holes; this curious little vessel, of the "incense cup" type, lay near the western margin of the cairn. Charred wood was found throughout the mound in large layers, especially near the spots where urns or bones occurred; the latter were principally within the vessels, and were almost wholly human. These urns have been presented by Mr. Llewellyn to the British Museum, where the series of this class of early relics is very scanty.[2] Although not immediately connected with the district to which the present memoir chiefly relates, the foregoing details cannot fail to prove acceptable, as showing in a remarkable manner the usages of the earlier races in regard to urn-burials.

Several other interesting illustrations might be cited of these usages, that varied in some respects according to local conditions of the surface or the soil; the ready supply, for instance, of slabs suited for the sepulchral cist, or of loose stones for raising the cairn, would necessarily lead to certain modifications in the funereal deposit. Of the cist, or diminutive chamber constructed within the mound, the discoveries made by Mr. Llewellyn at Carn Goch, as before cited, supply most instructive illustrations. Examples, figured in the Archæologia Cambrensis, accompany the present memoir, in which

[2] Proceedings Soc. Antiqu., vol. iv. p. 303. Mr. Llewellyn has given some further notices of this cairn in the Archæologia Cambrensis, vol. ii., Third Series, p. 65, where a ground plan of Carn Goch may be found. Amongst other results of researches there made in 1855 are noticed cists cut in the substratum, with bones and ashes; also a large urn much broken measuring more than 13 inches in height, and much ornamented by impressions of twisted thongs or reeds.

Fig 8.

Fig. 9.

Cists enclosing urns found in a mound on Mynydd Carn Goch, near Swansea, Glamorganshire, in 1855, by Mr. J. T. Dillwyn Llewellyn.

the large inverted urn appears, protected by flat pieces of rock, that were doubtless easily obtained in those parts of Glamorganshire.[3] See woodcuts, figs. 8, 9. It is not without a certain deep interest that we may mark the feeling of pious affection or respect to the remains of the relative or the chieftain, the desire for preservation of their ashes, the careful precaution against their mingling with the common earth, that almost might seem darkly to shadow forth some notion of a future existence.

It may here deserve notice in regard to cist-burials that examples not unfrequently occur in which the corpse had been deposited unburnt, either crouched up or extended at full length, and it is probable that some of these deposits may be referred to times anterior to the practice of cremation. About the year 1860 the remains of five skeletons were found in making a road at Carreglwyd in Anglesey, the seat of the late Mr. R. Trygarn Griffith, in the parish of Llanfaethlw. From the remains, which were much decayed, the bodies seemed to have been stretched out at full length; four of them appeared to have been of small stature, about $4\frac{1}{2}$ ft., the fifth had been nearly 5 ft. in height. They had been placed upon rough stones, and surrounded by other stones in the form of a rude coffin or chest, but apparently without any covering-stones. The bones had mostly been reduced to dust. These graves were sunk about 2 ft. in the clay below the general surface of the field. From the appearance of the ground there had, in all probability, been a mound over the graves, but it had been removed, the spot being near the lodge-entrance to Mr. Griffith's house. The direction in which the bodies had been buried appeared in this instance to have been east and west. Each corpse had a separate cist of rough stones; no object of bronze, no ornament of metal, of jet, or of amber was found. According to tradition, a battle was fought near Carreglwyd with the Danes; a large upright stone or menhir, about a mile distant from the interments in question, has been traditionally regarded as marking the spot where that conflict occurred; there is, however, no distinctive feature in the discovery above related that would associate it with the invasions of the marauding Northmen.

[3] The Institute is indebted to the courtesy of the Cambrian Archæological Association for the use of these and some other woodcuts that accompany this memoir.

Of the second class, the urns designated by the late Sir Richard Colt Hoare "incense cups," a very curious example (see woodcut, fig. 10) has been found near Bryn Seiont, Carnarvonshire, not far from the site of Segontium. It lay within a large cinerary urn that was unfortunately broken into fragments by the finders. It is to be regretted that the form and ornamental peculiarities of that vessel are not known; these little cups, especially of so curious a fashion as the specimen in question, have rarely occurred in Wales. As already noticed they have commonly been found associated with the large cinerary vessels of the early races, although probably not with the most ancient of their interments. The cup is formed with considerable skill; the paneled compartments are arranged lozengewise, with open work suggesting a certain resemblance to a little basket; some of the mouldings are impressed with irregularly formed punctures. The bottom of this vessel is very curiously wrought with bands disposed spirally in contrary directions; the upper series of these bands, six in number, is marked with punctures or dots like those already mentioned; the bands, as will be seen by the woodcut, radiate from a central disc that is impressed with a small cross surrounded by dots (fig. 11). Although this cruciform ornament may probably have no special or symbolical significance, it is doubtless remarkable that on the bottom of another of these "incense cups" found in Pembrokeshire, having likewise lozengy apertures around its circumference, a cruciform ornament is found of even more remarkable fashion than on the Bryn Seiont vessel. By the friendly permission of the Cambrian Archæological Association a representation of the cup, published in their Transactions, is here given. See figs. 12, 13. It was found in a carnedd or stone heap at Meinau'r Gwyr in the parish of Llandyssilio, Pembrokeshire.[4] A small sword or dagger of bronze is stated to have accompanied the deposit. A circle of large stones formerly existed near the spot.

[4] See a memoir by the late Mr. John Fenton, son of the author of the Tour in Pembrokeshire, Archæol. Cambr. vol. vi., third series, p. 32. This cup was in possession of the late Rev. E. Harris of Bryndyssil, but the bronze blade had unfortunately been lost. Another very singular little vessel was likewise found at Meinau'r Gwyr; a representation is given by Mr. Fenton, who describes it as resembling "a miniature Stonehenge," being fashioned with upright projecting ribs that meet a rim at the top of the drum-shaped urn, and may remind us of a certain general resemblance to the trilithons of the massive monument in Wiltshire.

Fig. 10.—Incense Cup found in a sepulchral urn near Bryn Seiont, Carnarvonshire. Height nearly 2 inches, diameter 2¼ inches. In the possession of the Rev. W. Wynne Williams, of Menaifron, Anglesey.

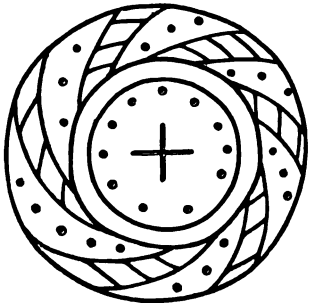


Fig. 11—Incised ornament on the bottom of the cup found near Bryn Seiont.

Fig. 12.—Incense Cup found in a carnedd or stone heap at Meinau'r Gwyr, in the parish of Llandyssilio, Pembrokeshire. Orig. size.

Fig. 13.—Cruciform ornament on the bottom of the incense cup found at Meinau'r Gwyr. Orig. size.

The strange notion suggested by the late Mr. John Fenton in his account of this curious discovery can scarcely be accepted. He observes that these little vessels "may have appertained to inhabitants of diminutive stature that existed among the Celtic tribes at a prehistoric period;" and he adds that vestiges of such a supposed race of pygmies have occurred likewise in Wiltshire, with very small bronze weapons and stone celts. Mr. Greenwell has noticed the occurrence of such "toy implements." Arch. Journ., vol. xxii. p. 243, note 3.

The cup found near Bryn Seiont is of pale brown color; the paste well compacted and burned. It measures nearly 2 in. in height by 2½ in. in diameter. No example of the like form and elaborate fashion, it is believed, has hitherto been noticed in Wales; it may, however, be compared with other "incense cups" of more simple character, such as that above described, from Llandyssilio, and another, which differs from it in not having compartments of open work, being only pierced with small perforations as if for suspension. This last, likewise from Pembrokeshire, was brought to light in a carnedd near Cronllwyn. Three of these little vessels were, as related by Mr. Fenton, placed around an urn of very large dimensions (nearly 3 ft. in height). Such small urns, he observes, had occasionally been found placed within those of larger size in mounds or "carneddau"; from the perforations in the sides and underneath, and also from the very singular shape of these vessels, it might be presumed that they were filled with some combustibles or oleaginous substances and suspended over the sepulchral fire to add force to the flame.[5] In these conclusions Mr. Fenton seems to have found, whilst engaged on his tour through Pembrokeshire, a very able guide and coadjutor—the first reliable authority in regard to sepulchral vestiges of the earlier periods in these islands—Sir R. Colt Hoare. Subsequent investigations have not adduced any fact, so far as we are aware, opposed to the probable notion that has given the designation "thuribles" to the diminutive vessels in question.

[5] Fenton, Tour in Pembrokeshire, p. 580; see pl. II. fig. 7. Some interesting particulars are there given in connexion with interments and burial-urns in that part of Wales. The upper part of the cup that he has figured is ornamented with a trellised or lozengy pattern, but without open work. It is not stated whether any markings were to be seen scored or incised on the bottom, as on the specimen found at Llandyssilio. See figs. 12, 13, *supra*.

The supposition that they were intended to be hung up above the level of the eye may seem in some degree confirmed by the occurrence of ornament on the under surface, wrought with considerable care, and never found, so far as we are aware, on the bottom of any urn of the other types, in which also adjustment for suspension is very rarely, if ever, provided.

A brief notice of some other examples of the "incense cup" found in various parts of England may be acceptable. One, elaborately worked, pierced also with lozengy and oval apertures over the whole surface, has been figured in this Journal; it was brought to light in 1859, with a large cinerary urn, in a barrow at Bulford near Amesbury.[6] The form is unusually elegant; this cup, of dark brown color, measures nearly 3 in. in height by 3¼ in diameter. Two small bronze pins and some little beads of a white coralloid material occurred with it. On the under side of the base an ornament

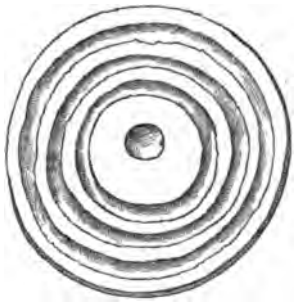


Fig. 14.—Ornament incised on the bottom of an incense cup found at Bulford, Wilts. Orig. size.

is deeply incised, as here shown, fig. 14. The concentric circles are traced with great precision, and they bear a certain resemblance to some of the mysterious rock-markings that have recently excited so much attention in Northumberland, North Britain and other localities, as described by Mr. George Tate and Sir James Simpson.[7] A similar ornament occurs on the unique gold cup found in a cist in Cornwall, and preserved, as treasure trove of the Duchy, in

[6] Arch. Journ., vol. vi. p. 319. The circles on the bottom are not there noticed.

[7] The Ancient British Sculptured Rocks of Northumberland, by George Tate, F.G.S.; Alnwick, 1865, twelve plates. The remarkable volume lately published, under the auspices of the Antiquaries of Scotland, by Sir J. Simpson, Bart., comprises all examples of the markings hitherto noticed in various parts of the British Islands.

possession of the Prince of Wales, through whose kind permission it was lately brought for the inspection of the Institute by Mr. Smirke.

A curious "incense cup" is figured in the Archæologia that was found near the "Nine Ladies," on Stanton Moor, Derbyshire. It measures about 2¼ in. in height, by 3 in. in diameter; the form is cylindrical, like a small barrel; it is fashioned with triangular openings, in zig-zag design, around the upper part, and it is pierced on each of its sides with two small perforations (about an inch apart), probably for the purpose of suspension.[8] It was found in a large urn which had the unusual accompaniment of a cover, a disc of baked clay.

In another example the upper part of the cup is entirely closed, and impressed with corded lines, trellis-fashion; the lower part is formed with narrow diagonal slits. The dimensions are 3¼ in. by 2½ in. in diameter. It was found on Clayton Hill near Brighton, and contained a circular object of very curious character, a little locket of vitrified paste of light blue color.[9] The fashion of the "thuribles," or "incense cups," is singularly varied; Sir Richard Colt Hoare gives several examples, one of them covered with bosses, like a bunch of grapes, in his Ancient Wilts. They have occurred likewise not uncommonly in barrows in Yorkshire and Derbyshire.

Of the third class of sepulchral urns no well characterised specimen has been noticed, so far as we are aware, in Anglesey or Wales. The small urns, however, that accompanied incinerated deposits at Porth Dafarch, before noticed, may possibly belong to this division, as they have no lateral perforations, and possess none of the usual features of the "incense cup." They seem more suited to have served as food-vessels.[1] The urns of this class, however, usually accompany unburnt remains; their varied fashion has been well illustrated by Sir Richard C. Hoare and by the late Mr. Bateman in his works on sepulchral vestiges in Derby-

[8] Archæologia, vol. viii. p. 59.

[9] Arch. Journal, vol. xix. p. 185, where both the urn and locket are figured. A specimen found in a "bell barrow" at Beedon, Berks, is given, ibid. vol. vii. p. 66, with another from the Malvern Hills; see also a good example from Dorset, vol. xii. p. 193. Mr. Greenwell found one in a barrow in Yorkshire; ibid. vol. xxii., fig. 12, p. 247. See various other forms of the thurible in Akerman's Archæol. Index.

[1] Memoir on a Sepulchral Deposit in Holyhead Island; Arch. Journal, vol. vi., p. 230.

shire.[2] The ornament is mostly wrought by pointed or blunt implements, of wood probably or bone, and it is usually found only on the upper part of the vessel.

The urn which remains to be described is an example of the fourth group, the "drinking cups," according to the classification previously given. Vessels of this peculiar and highly decorated type are not uncommon in Wiltshire, Derbyshire, Yorkshire and some other parts of England, but no specimen appears hitherto to have occurred in Anglesey or in Wales. The discovery was made at a farm-house belonging to Mr. Lloyd Edwards at Rhosbeirio in the northern parts of Anglesey, about two miles from the coast, and in a district full of ancient remains. A burial-place was brought to light in the farm-yard; it measured about 3½ ft. in each direction, and was covered by one large unhewn flagstone, the bottom and sides being formed of several large flat slabs. Within this cist lay human bones and the urn, of which a representation carefully executed from a photograph accompanies this account. See fig. 15. This vessel is elaborately ornamented with lines of impressed punctures produced by a cord or some blunt instrument; it was much broken, but has been skilfully repaired by Mr. Ready. No bones or ashes were found in the urn; the body appeared to have been interred crouched or doubled up. The urn, which was placed at the back of the head or the shoulders, measures 8 in. in height; the circumference at the mouth is about 11 in. It is of a light reddish-brown color, and slightly lustrous in some parts.

Not far from the spot where this discovery occurred there was found, in a place described as a semicircular fort, at Llanrhyddlad, a bronze celt or axe-head of the most simple type, stated to have been in shape like "the heater of a box-iron." Its weight was about 2½ lbs.; this relic is unfortunately lost, having been sold to a pedlar for three shillings and sixpence. Within the earthen fortification a pavement of stones was noticed. The urn remains in possession of Miss Maria Conway Griffith, of Carreglwyd, by whose permission it was sent for the inspection of the Institute.

[2] Bateman, Derbyshire Antiquities: see also his Ten Years' Diggings, and the detailed Catalogue of his Museum at Youlgrave. The permanent preservation of that very instructive collection has been ensured, as far as practicable, by the provisions of Mr. Bateman's will. Mr. Greenwell figures two examples of the food-vessel, Yorkshire Grave-hills, Arch. Journ., vol. xxii., p. 260, figs. 8, 17.

Fig. 15.—Urn found in a cist at Rhosbeirio, Anglesey. Height 8 inches; diameter, at the mouth, about 8¾ inches.

In the possession of Miss M. Conway Griffith, of Carreglwyd.
(From a photograph.)

This part of Anglesey is believed to have been the scene of many a conflict between the ancient inhabitants and the Irish or Danish marauders. There are, as already observed, numerous vestiges of antiquity scattered throughout the district. At no great distance towards the west a spot is still pointed out that is associated with very interesting tradition. The small creek or landing-place known as Tre Fadog, a name in which, through a mutation of letters for the sake of euphony, the obscure trace of Porth Madoc is supposed to be preserved, has been pointed out as the port whence Prince Madoc embarked on the quest for the New World. Whatever may be its claims in comparison of those of another place with which so interesting a tradition has more commonly been connected, here are to be noticed grassy entrenchments that appear to have protected the landing-place; and, if we may suppose this to have been a haven at which the piratical Northmen effected their incursions, many bloody struggles must have occurred in the neighbourhood.

The beautiful urn, however, brought to light in the cist at Rhosbeirio may probably be assigned to a period anterior to local tradition. Vessels of this type, of which a few remarkable varieties have been noticed in a previous part of this memoir, seem to appertain to a race that had comparatively made advancement in civilization. The urns, and also the relics or weapons by which they are accompanied, indicate superior skill in working and polishing the flint or other material; the use of bronze was not wholly unknown. Cremation had, moreover, been almost discontinued; the corpse was deposited in a contracted posture either in a cist of stones set edgeways, or in an oblong cavity formed in the earth, the head being in many instances placed towards the north. In Wiltshire and other parts of England the sepulchral depository is sunk in the chalk, clay, or other local substratum; a mound or a cairn, according to the nature of the material at hand, usually marked the site of the burial.

As the urns of this fourth class, and also those designated food-vessels (class 3), very rarely, if ever, contain either ashes, burned bones, or any object of personal use, we may conclude that they were appropriated to some other special purpose. The custom appears to have prevailed amongst certain races of antiquity, as Sir R. C. Hoare has remarked, which is still practised by some savage peoples, of depositing

articles of food with the corpse, and it seems highly probable that the vessels in question may have served such a purpose. This conjecture has received some confirmation from the curious observation recorded by Mr. Bateman.[3] That careful investigator describes a deposit at Castern near Wetton, Staffordshire; the skeleton lay in a cist cut in the rock; it was accompanied by a single implement of flint and a remarkably fine "drinking cup." The vessel showed distinctly on its interior surface an incrustation indicating that it had contained some liquid when deposited in the grave; the liquid had filled about two-thirds of this very curious vase. Sir Richard Hoare has described a remarkable interment in a barrow near Stonehenge; three skeletons were found laid one over the other, placed north and south. Near the right side of the head of one of them was a cup containing a quantity of a substance that in its perishing condition seemed to be decaying leather, possibly, however, some article of food; six feet below lay a skeleton, with a richly-decorated "drinking cup."[4]

Many notices and representations of "drinking cups," closely resembling in form and dimensions that found at Rhosbeirio, may be found in the works of Sir Richard Hoare and other antiquaries.[5] Amongst these, however, there is none so remarkable as a specimen found some years ago under a barrow at East Kennett, Wilts, near that described by Stukeley as "The long Arch-druid's Barrow."[6] It was sent by the late Bishop of Salisbury, with the other relics disinterred at the same time, to the Museum formed at the Annual Meeting of the Institute at Salisbury in 1854. The vase, placed at the feet, and similar in shape to that found in Anglesey, is of more graceful

[3] Vestiges, Antiqu. in Derbyshire, p. 87.

[4] Ancient Wilts, vol. i. pl. xvi. p. 163.

[5] See especially the account of a large circular barrow at Winterbourn Stoke. Ancient Wilts, vol. i. pl. xiv. p. 118. Skeletons were found in cists cut in the chalk; at the feet of one of them lay a cup ornamented with horizontal bands, also two pieces of dark colored stone, resembling hones or burnishers, a bed of jet, and a rudely-chipped flint spear. A barrow near Stonehenge, described ibid., pl. xvii. p. 164, contained three skeletons; at the feet of that first deposited there was a drinking cup very elaborately ornamented; it contained a broad flat blade or spear-head of flint, and a singular oblong stone highly polished. Another specimen, found at Dorrington, lay at the head of the skeleton with stags' horns and pieces of flint apparently prepared for implements of war or for the chase; this urn is probably the best preserved and most richly decorated specimen disinterred by Sir R. C. Hoare. Ibid. pl. xviii. p. 168. Several urns of this class, scarcely less remarkable, may be found in Mr. Bateman's Vestiges of Ancient Races in Derbyshire, and his Ten Years' Diggings, *passim*.

[6] Abury, p. 46.

outline; the incised decoration is perhaps unique in delicacy of execution. It consists chiefly of horizontal bands of zig-zag work, and square compartments that are traversed by diagonal bands, saltire-wise, the ground minutely stippled. The skeleton, in perfect preservation, the head towards the east, lay in a cavity, about 5 ft. deep and about the same in length, cut in the solid chalk and roughly vaulted over with blocks of "sarsen stone." Along the right side of the corpse there had been a wooden staff. There were also, near the right elbow, a beautiful axe-head of hard grey limestone perforated for a haft, and a broad thin blade of bronze, probably a dagger; the handle had wholly perished, it had been attached by three rivets that still remained. This blade measured $5\frac{1}{2}$ in. in length, and $2\frac{3}{8}$ in., greatest breadth.[7] The cist, in this remarkable interment, lay beneath a small barrow raised about 4 ft. above the natural level, and composed of chalk covered with dark mould full of animal bones. In a small adjacent mound were bones of deer, wild boar, and birds, in very large quantities.

The foregoing notice, hitherto it is believed unpublished, of one of the most remarkable interments on record, of the age to which the highly ornamented drinking cups appertain, cannot fail to be an acceptable accompaniment of the account of the urn of that class, the first found in Anglesey. It presents, moreover, an instructive exemplification of the burial-usages of the period, with the combination, comparatively rare, of weapons both of stone and metal that show the highest skill in their manufacture.

In concluding this account of fictile relics brought to light in Anglesey and various parts of the Principality, in which also it has been thought desirable to refer, for the purpose of comparison, to such objects of the like class, respectively, as have occurred elsewhere, it is almost needless to remind the reader that it is almost exclusively from the grave-mound and the recesses of the burial-cist that our very

[7] Compare the axe-head of similar type, Hoare, Ancient Wilts, vol. i. p. 165, and the bronze dagger, p. 105. The deposits of the period that have been examined in Wiltshire mostly present relics of superior workmanship, indicating a higher degree of civilisation than may have existed at the same age in other districts of Britain. Several beautifully wrought drinking-cups, exactly similar in fashion to that found in Anglesey, have occurred in Northumberland, accompanying unburnt bones deposited in stone cists, but without objects of metal. A valuable collection is preserved at Alnwick Castle. A good specimen from a cist at Amble near the mouth of the river Coquet, is figured, Archæol. Journal, vol. xiv. p. 282.

imperfect knowledge has been gathered in regard to the earlier occupants of the British Islands. Of the active life of those remote races we possess doubtless some vestiges in the strongholds and vast entrenched works that crown many of our hills, whilst no one can fail to be impressed by the solemn yet simple grandeur of stone monuments,—the Cromlech, the Circle, and the Menhir,—but it is from the dark chambers of the tomb that we are enabled to gain our slender knowledge, not merely of the funereal usages of those ancient races, but of the skill to which they had attained in fabricating objects of warlike or of domestic use. Hence, moreover, may we seek, however dimly, a certain insight into the progress of civilisation. Amongst those relics, the urns, commonly designated sepulchral, are almost the only objects that present any approach towards the arts of decoration, and afford some evidence of peculiar style or motive of ornament.[8] Hence it is, that fictile vessels of the earlier races may claim careful consideration. Greatly are we indebted to such zealous and acute observers as Mr. Greenwell, who, during recent investigations of grave-hills in Yorkshire, has thrown much light on the traces of early occupation in the northern counties. We may refer to the series of burial-urns brought to light in his researches in 1864, and published in this Journal, as comprising the most instructive exemplification, probably, hitherto brought before the archæologist.[9]

A question of considerable interest suggests itself in connection with the ancient vessels, the fashion and uses of which it has been the object of the present memoir to illustrate by examples chiefly derived from the northern parts of Wales,

[8] A few examples of celts and blades of bronze with geometrical ornament incised or impressed by hammering have occurred in England, the designs resembling for the most part those that occur upon urns, such as zigzag lines and the like. Such objects of bronze, are, however, very rare in this country, although comparatively common in Ireland. A large celt found in Northumberland and thus decorated is in the Museum at Alnwick Castle. Archæol. Journ., vol. xix. p. 363. See also vol. xviii. p. 167. These relics are, however, of a much later period than the greater portion of the large cinerary urns, such as those noticed in this Memoir, and which present, without exception, the only examples of decorative work in Britain at the early period to which such fictile productions may be assigned.

[9] Archæol. Journ., vol. xxii. pp. 97, 241. The long promised work on the grave-hills and earlier antiquities of Dorsetshire by Mr. Charles Warne, F.S.A., will supply a very valuable illustration of the burial-urns of a district singularly rich in ancient remains; many of these vessels are of unusual dimensions, differing, also, in their fashion from those of other parts of England.

or from the ancient Mona. The urns familiarly designated "sepulchral" have been regarded by some antiquarian authorities, whose conclusions well deserve consideration, as properly and exclusively destined for mortuary uses, presenting also in their form or their decoration features specially significant or symbolical in connection with the hallowed purposes of funeral rites. Such an opinion has lately been expressed in this Journal by one of our most sagacious investigators, who distinctly asserts his belief that none of the vessels accompanying interments,—incense-cups, drinking-cups, or the like,—were domestic; all these *fictilia* were, according to his judgment, specially manufactured for the purposes of burial.[1] This may, however, appear questionable. Amongst ancient peoples, of whose advanced conditions and of whose skill in decorative arts we have ample evidence,—the Greeks and the Etruscans,—we may recognise the use of sepulchral vases, properly thus designated; the subjects delineated upon them appearing, in many instances, to indicate such a primary intention. On the other hand, the admirable vases of bronze, of clay, and of glass, that occur with Roman interments, are, perhaps without exception, such as were in daily use. The so-called "cinerary vases," with which frequent discoveries of Roman burials have made us familiar, are almost exclusively such as were, in their original intention, of daily use, but most readily available also as *obruendaria*, or depositories for the incinerated remains. Of the same unquestionably domestic character are the *ampullæ*, *patellæ*, and *pateræ*, the lamps, and the jars or *ollæ*, with other accompaniments of burial in the Roman age.

To revert, however, to burial-urns of the pre-historic age to which the present memoir relates; it appears highly improbable that, in times of low and inartificial conditions, any objects or fictile vessels should have been specially fabricated for funeral rites. It must be considered, moreover, that no other pottery whatever, of that early period, has been brought to light in Britain, so far as we are aware, that may be regarded as of domestic use, in contradistinction to such as may have been exclusively sepulchral.[2] All other accom-

[1] See Mr. Greenwell's Memoir on Grave-hills in the North Riding of Yorkshire, Archæol. Journ., vol. xxii. p. 99, note 4.

[2] The investigation, however, of any sites of dwellings in the early times has hitherto been very imperfect, It is probable that some of the "hut circles" or

paniments found in the grave-hill are such as were used in daily life, implements of the chase or of war, the knife or the arrow-head of flint, ornaments of jet and of amber, the whorl of the distaff. Of the four types of urns, according to the classification given at the commencement of this memoir, two,—the food vessel and the drinking cup, appear unquestionably designed for the ordinary uses of life. We can scarcely doubt that such was their original intention; that they were actually the household appliances used by the deceased when living, and placed near the corpse, with provision for the dreary journey of darkness to a state of existence beyond the grave.[3] The so-called food vessel is, in many examples, provided with projections or ears pierced, so that a cord, of twisted sinew possibly, or of vegetable fibre, might pass through them. The inference seems obvious, that such vessels were adapted either for convenient transport or for suspension in the dwelling.

In regard to the curious so-called "incense cup," and the purpose conjecturally assigned to it, namely, to contain certain perfumes or unguents suspended over the funereal fire, either, as Mr. Fenton imagined, to augment the flame, or to diminish in some degree the disagreeable odors of the burning corpse, it is doubtless possible that even in a very primitive state of society such a practice may have existed. It were, indeed, no idle supposition to trace herein some tradition of Oriental usages, preserved amongst the descendants of Aryan or other immigrant Asiatic races. We are indebted to Mr. Lodge, whose residence in India has made him conversant with usages in the East, for the information, that in cremation at the present time, as he had occasion to observe, it is not unusual to place upon the breast of the corpse a small cup of earthenware, containing some powerful perfume, whereby the disgusting and insalu-

of the remains of trogloditic abodes, for instance in the cavities lately explored near Salisbury, may be referable to very archaic times. At Caerleb, Anglesey, fragments of pottery resembling the sepulchral urns have been found in a circular dwelling inside the camp. The earliest traces of fictile manufacture have been assigned to the "Reindeer Age"; fragments of rude pottery occur in the kjoekkenmoedding in Denmark, supposed to be of the age of polished stone implements.

[3] In some "long barrowa," (in which urns are not found,) for instance at Winterbourne Stoke, Wilts, small circular or oval cavities have occasionally been noticed, sunk in the chalk, near the deposit of bones. These may, as Mr. Greenwell observes, have served the same purpose, namely receptacles for food or drink, as the urns deposited with unburnt bodies in the later grave-hills. Arch. Journal, vol. xxii., p. 105, note 9. Such cavities were also formed to receive the incinerated bones. Ibid. p. 259, note 3.

brious stench might be remedied. In Eastern lands, such potent fragrance was readily obtained; but whence, it may be asked, were perfumes or unguents to be procured in the "Neolithic" or Later Stone Age, to which the vessels under consideration appear mostly to belong? In some districts of Britain even the resin of the *Pinus sylvestris*, the stately growth of which in Denmark at that period seems subsequently to have been superseded by the oak, may have been obtained with difficulty, although possibly this and other coniferous trees had long flourished in some of our forests.

These are, however, points of curious investigation that the limits of the present notices do not permit us to pursue. It may suffice to invite attention to the probability that all the so-called sepulchral vessels, without exception, were fabricated for the ordinary purposes of daily life.

In the foregoing notices of a very remarkable class of early relics, no endeavour has been made towards determining the age of the various types respectively, or the precise periods of advancing civilisation to which they may appertain.

The address on primæval antiquities, delivered by Sir John Lubbock, at the congress of the Archæological Institute in London, has brought before us a valuable and lucid summary of the results of modern research in regard to the succession of periods, and the evidence on which conclusions have been based.[4] In the "Palæolithic Age," it is believed that, in Western Europe, no trace of pottery or of metal is found; implements of stone, never polished, and distinct in their form, characterise that archaic period. Hand-made pottery, with polished stone axes or implements, occurs first amongst vestiges assigned to the "Neolithic Age." To this later stone period, extending, according to the conclusions of archæologists of reliable authority, to a thousand years, approximately, before our era, the most ancient interments seem to belong. The corpse, in a sitting posture or crouched up, or the ashes after cremation, was deposited in the burial-mound. The introduction of bronze into Western Europe, about the time that has been mentioned, by no means superseded the use of stone implements. During the examination

[4] Arch. Journal, vol. xxiii., p. 190.

of burials by Mr. Bateman, in three-fourths of the barrows containing bronze, stone objects also occurred. It should be borne in mind, although the case may be purely exceptional, that the Normans found opponents who wielded the axe of stone as late even as the battle of Hastings. The fashion of the burial-urn likewise was in all probability retained occasionally, long after the supposed limits of the Stone Period to which it properly may be ascribed; and it is by no means incredible that the vase disinterred, as before related, in the Islet of Bronwen near the banks of the Alaw in Anglesey, should have actually contained the ashes of the Fair Aunt of Caractacus, in accordance with the local tradition.

To the Bronze Age, commencing possibly some thousand years before our era, the more skilfully fabricated urns are doubtless, for the most part, to be assigned. It should, however, be no marvel if, with vessels apparently analogous to the drinking cup, the thurible, or the food vessel, relics of types recognised as properly of more archaic character,—the axe of stone, or the flint flake—should, in certain exceptional cases, be found associated in the tomb. It is even possible, that some evidence of the incipient knowledge of iron, by which bronze may have been almost superseded, in most parts of Western Europe, about two thousand years before our days, should, in a few exceptional instances, be brought to light amidst vestiges of more ancient usages and industry.

These, however, are subjects still involved in great obscurity; the most sagacious may hesitate to assert positive conclusions, in regard even to inquiries that arise as we approach more nearly to the dawn of historic light.

Fig. 7, *a*.—"Incense Cup," found at Mynydd Carn Goch, near Swansea. British Museum. Original size.

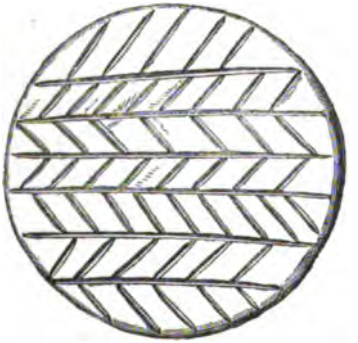


Fig. 7, *b*.—Ornament on the bottom of the "Incense Cup" found at Mynydd Carn Goch.

NOTICE OF A SWORD OF STATE, BEARING THE NAME OF POPE SIXTUS V.

By EDMUND WATERTON, F.S.A.

THE large sword which I exhibited at one of our late meetings, I believe to be one of the swords which are blessed on Christmas Eve at the Midnight Mass by the Sovereign Pontiffs. It bears on the blade the arms of Sixtus V., his name, and the date.

SIXTVS . V . PONT . MAX . ANNO . IIII .

The same inscription is repeated on the other side. The blade from the point to the hilt measures 3 ft. 9 in.

I purpose, on another occasion, to read a paper on the history of these swords, a subject of considerable interest; and to give a list, so far as I can ascertain, of the various swords which were given, and of the recipients. Of our English kings, those who were honoured with this gift were :—

Edward IV. . . circa 1478.
By Sixtus IV.

Henry VII. . . c. 1505.
By Julius II.

Henry VIII. . . c. 1517.
By Leo X.

In 1514, James V. of Scotland received the blessed sword from the same Pontiff; and again, in 1537, on the 19th February, from Paul III.

Although the Sword and Ducal Cap are blessed every year, they do not form a yearly gift : several years elapse without their being sent to any king, or prince, or distin-

guished personage; whilst, on the other hand, we have instances of their being given for several years consecutively. We also find the same sovereign receiving the blessed sword from two different Popes, as in the instance of James V. of Scotland already mentioned.

The engraving on the blade proves it to have been a sword of state; that is, a sword to be presented on a great occasion; the name SIXTUS V. identifies it with that Pontiff, the date, ANNO IIII. denotes a year. Hence this sword may indubitably be assigned to the fourth year of the reign of Sixtus V. The suggestion, that it may have been one of the large swords borne on state occasions by the Swiss Guard at the Vatican cannot be held; for, in the first place, their swords are all plain ones, some are straight, others are wavy, and all of them have much larger cross bars and longer hilts. The hilt on this sword is a clumsy modern addition.

That the Blessed Swords were large, and two-handed, I shall produce two proofs.

1. In the Inventory of the Regalia of King James I. in the Tower, occurs the entry:—"Item one greate twoe handed sworde garnyshed and guylte, presented to King Henry VIII. by the Pope." (Catalogue of the Antiquities and Works of Art exhibited at Ironmongers' Hall: p. 135. In the Catalogue this sword is erroneously stated to have been given by the "warlike Julius II.," whereas it should have been Leo X.).

2. Cartari (p. 22, quoted by Moroni, vol. lxx. p. 52) says that in the Books of the Depositeria Apostolica of the time of Sixtus V. there occurs an entry, that the Golden Rose, and Sword, and Belt, and Cap ornamented with pearls, cost 760 scudi. In this entry the Sword is described as a Great Sword—*Spadone*—and being mentioned in conjunction with the Ducal Cap (the "*Pileum*"), can have reference to no other than the Blessed Sword.

Consequently we have evidence that in the reigns of Leo X. and of Sixtus V., the blessed swords then given were two-handed or great swords.

I shall now endeavour to identify the recipient of this sword.

On the 29th July, 1587, Sixtus V. gave the Blessed Sword and Cap to Alexander Farnese, Duke of Parma,

Commander of the Spanish Forces in Flanders. (Tempesti, Storia di Sisto V., lib. 13, No. 29 & 30, and Leti, Vita di Sisto V. scritta dal Signor Geltio Rogeri Losannæ. 1669. Vol. ii., p. 307.)

This sword and cap were conveyed to the Duke by Monsignor Grimani, Private Chamberlain to Sixtus V., and they are described by Moroni as of great value—*d'alto valore.*

In 1588, Sixtus V. sent by a bishop to the Duke of Guise a sword similar to the one which he had presented in the previous year to the Duke of Parma. The date is not mentioned, but it appears to have been within the first half of 1588.

Leti says (vol. ii. p. 307) :—"Quasi nello stesso tempo (*i e.* the first half of 1588), invigilando il Pontefice sopra gli affari della Francia, haveva spedito al Duca di Guisa Capo della Lega Catolica una spada simile a quella che egli haveva mandato l'anno innanzi al Principe Farnese in Fiandra, ordinando al vescovo che era stato deputato da lui per consegnarla che gli manifestasse il suo affetto paterno e chelo decantasse per uno che teneva il primo luogo nell' animo Pontificio. Questa ceremonia si fece in Parigi con gran trionfo, e cosi grande che il Re medesimo cominincio ad haverne gelosia nel videre l'acclamationi popolari in favor del Guisa, benchè egli per modestia fugisse ogni honore che accadeva al suo stato."

In 1589, Sixtus V. presented the Blessed Sword and Cap through the nuncio at Florence, by Monsignor Michael Priuli, Bishop of Vicenza, the Papal commissary, to the Grand Duke Ferdinand I. The date is not given by Moroni.

In 1590, on the 25th of July, Sixtus V. sent the Sword and Cap to Sigismond III., King of Poland.

Thus Sixtus V., who reigned five years, four months, and fourteen days, gave only four Swords and Caps: viz., 1587, 29th July, to Alexander Farnese; 1588 (first half), to the Duke of Guise; 1589, no date, to the Grand Duke Ferdinand I.; 1590, 25th July, to Sigismond III. of Poland.

According to Palatius (Gesta Pontificum Romanorum, vol. iv., p. 367. Venetiis, 1688), Sixtus V. was elected on the 12th of April, 1585, and died August 27, 1590.

His regnal years, therefore, are,—

April 12, 1585	}	1.
„ 11, 1586	}	
„ „ 1586	}	2.
„ „ 1587	}	
„ „ 1587	}	3.
„ „ 1588	}	
„ „ 1588	}	4.
„ „ 1589	}	
„ „ 1589	}	5.
„ „ 1590	}	
„ 12, 1590	}	6.
August 27, 1590	}	

The date on the sword ANNO. IIII. refers, therefore, to the year beginning April 12, 1588, and ending April 11, 1589.

If we take ANNO. IIII. to refer to the regnal year, this may apply to the period when the Duke of Guise received the sword, and thus this sword may be the one actually sent to him by Sixtus V. But if we take ANNO. IIII. to designate the Christmas eve of the fourth year, when the sword was blessed, it is probable that this was the sword presented to the Grand Duke Ferdinand I. Consequently, it is in the exact interpretation and application of the date ANNO. IIII. that the solution of the difficulty lies.

I myself am inclined to apply the date as designating the year of the gift, rather than the year of the blessing, for this very cogent reason, that the presentation of the sword was not of fixed annual occurrence, but depended entirely upon the will and pleasure of the sovereign Pontiff; and if the date were held to designate the year of the blessing, it might so happen that a Pope might confer a sword engraved with the name and date of some one of his predecessors.

I hope to ascertain the exact dates as to when the swords of Sixtus were given from the Vatican.

The last sword conferred before 1587 was to Rodolph II. of Germany in 1576, after Gregory XIII. had approved of his election.

Within the last century and a half the swords have been rarely given. The last sword given was by Leo. XII., in 1825, to the Duke of Angoulême, and the Sword which is now annually blessed on Christmas eve, and carried in the procession together with the Cap on Christmas Day, was made in 1826.

NOTICE OF THE EXCAVATION OF A CIRCULAR CHAMBER AT TAPOCK, IN THE TORWOOD, STIRLINGSHIRE.

By BRIGADIER-GENERAL LEFROY, R.A., F.R.S.

ABOUT five miles west of the Forth at Airth, and three miles north of the Wall of Antoninus (Graham's Dyke) in Stirlingshire, there runs a low range of sandstone hills, terminating at the northern extremity in an eminence locally known as Tapock, and which commands an extensive view to the north, east, and west. Its actual elevation above the Forth is 396 ft. At this point, which may be described as a hillock, about 110 ft. in diameter at the base and 70 ft. by 50 ft. across at the summit, there had long been observed an opening on the surface some 4 ft. in depth, exhibiting on two sides a rude wall of large moss-covered stones, on a third side a narrow opening crossed by two large blocks of stone, like the lintel of a doorway. The rest of the surface of the mound bore a luxuriant growth of heather and whortle-berry plants, with a conspicuous group of Scotch firs on the northern side. One of them had been blown down, and in its fall shown that it was rooted over a confused mass of large loose stones. A Roman road is marked on the Ordnance Map (Stirlingshire, Sheet XXIII—IV) as passing very near the spot, but is not easily recognizable. Torwood[1] itself, however, is a very ancient physical feature of that region. Thus, we read in Barbour's poem :—

> "Leave I the Bruce sore moved in his intent,
> Good Wallace soon again to his host went
> In the Torwood, which had their lodging made,
> Fires the bait, that was both long and braid,
> Of nolt and sheep they took at sufficience,
> Whereof full soon they got their sustinence."

[1] Choill = wood, tor = eminence: Choill-tor—the Gaelic name.

The ruined baronial residence in the wood, although probably considerably later in date than the thirteenth century, is called Wallace's Castle, and may mark the site of some residence of his.

At this spot, in August 1866, the proprietor, Lieut.-Colonel Dundas of Fingask, commenced excavations, which were immediately rewarded by the discovery of the flight of steps shown on the plan, the opening having been fortunately at the adjacent angle, K.[2] The passage, K L, 11¾ ft. long, was then cleared out, and the point reached at which the trending of the walls to right and left showed that a large chamber was entered. Here the labour of getting out large stones from a depth of nine feet was found so great, combined also with a good deal of risk to the workmen, that the plan of operations was changed, and the excavation commenced at the top. They resulted in the unexpected discovery that the hillock, or at least the upper portion of it, is entirely artificial, and in the disclosure of a nearly circular chamber, 106 ft. in circumference, which occupied it.

The accompanying plan shows the exact form and dimensions of this chamber.[3] The steps, at E, ten in number, enter from the slope of the mound, and descend 4 ft. 3 in., to the general level of the floor. There are indications at the corner of convergence in the upper courses of stones, which make it doubtful whether the passage was flat roofed or vaulted, but two top stones spanning it remain *in situ* near the entrance to the chamber, forming the apparent doorway of fig. 5. To span the passage securely, the stones must have been at least 4 ft. long, and as none such were got out, it seems probable that the passage was stepped over. Thirteen feet to the right of this entrance, another passage was discovered, 4 ft. 8 in. wide in the widest part, but contracting to 2 ft. 10 in., 9 ft. high, and nearly 18 ft. long. It followed the natural slope of the east side of the mound, descending 3 ft. to a true doorway which was doubtless the main entrance to the chamber, and is on a scale that may be called grand. It is shown in the accompanying illustration. Each jamb side-post is a single stone; the

[2] A memoir on this excavation was communicated in March, 1865, by Col. Dundas to the Society of Antiquaries of Scotland, and it has been printed in their Proceedings, vol. vi. p. 259.

[3] The scales upon the plan refer only to the sections.

Interior view of the doorway leading from the passage and steps, Tapock.

From a drawing by Col. Joseph Dundas, F.S.A. Scot.

one on the left is 6 ft. 6 in. high, the one on the right 5 ft. 7 in., each about 17 in. square; the larger therefore contains nearly a ton of stone. A stone 14 in. thick is added at the top of the latter to gain height, and then the whole is spanned by a massive lintel about 5½ ft. long, 10 in. deep at one end and 16 in. at the other. This fine feature is represented in the section, fig. 5. The passage, always descending, continues 10 ft. further, and runs out at the foot of the mound opposite an opening or depression in the boundary wall, which seems to have been the exterior gate of the position.

Nine inches from the stone door-posts, at 3 ft. from the ground, there is a rude bolt-hole in the wall on each side; the one on the left runs back 6 ft., and evidently contained a stout bar, but it is not so easy to guess the nature of the barrier it closed: the space suggests a rude door of young trunks of trees bound together perhaps with withes; but there is no appearance of any fastening of hinges, therefore we may suppose that it was only closed in time of danger.

The architecture of the chamber is of a primitive description: blocks of the readily cleavable sandstone of the neighbourhood are laid without any kind of cement, and with little attention to the fitting of joints, in about nine courses; the largest are 3½ ft. long, and 1 ft. thick; at intervals of 3 or 4 ft., sometimes on one course sometimes on another, two stones are purposely separated a few inches to form a notch. Of these recesses there are nineteen, but all were empty. The only noteworthy feature was the circumstance that the wall from E to K is not in one plane, the upper portion falls back about one foot behind the lower. The courses of this upper portion were so regular, and the face so perfect and vertical, that it does not appear as if a facing of stone had fallen in, still less as if the upper courses had been thrust back, which could hardly have occurred without disturbing them. With respect to the roof, I see no way of avoiding the conclusion that the whole chamber formed one vault, startling as it appears, when we consider the span of it and the consequent height. It may, however, like Arthur's Oven, have been open at the top, which would very considerably diminish the height.[4] Not the slightest

[4] Arthur's Oon or Oven, of which no trace now remains, was on the river Carron about 3 miles to the N. E. of Tapock, and is described by Gordon in the Itine-

appearance of divisional walls was detected, or of columnar supports. The entire chamber was filled to the level of the ground with flat stones intermixed with a great deal of small rubble, such as would be used for filling in, the whole amounting to at least 400 tons; and it was observable, wherever the operation exposed a section, that many of the stones inclined inwards and downwards to the centre, as would be the case if the vaulting caved in at about half its height. Upon this supposition, the interior height cannot well have been less than 40 ft.; but it will be remembered that the New Grange chamber, in Ireland, measuring only 15 ft. across, is 20 ft. high. The immense weight of the stone, which can only have come from the roof, precludes the idea of wooden supports, which are, besides, unknown to these structures; the fate of Damocles would be enviable compared with that of a Celt with 400 tons above his head depending on wooden props.

The excavations of the chamber were nearly unproductive of interesting remains. Among the stones three were found incised with circular markings nearly resembling those to which Dr. Collingwood Bruce, Mr. G. Tate, and Sir J. Simpson, have directed attention.[5] They appear to have been *in situ* on the rock from whence the stone was quarried, and, if this point could be established, would tend to prove that they were the work of an earlier race than the builders of the chamber, and one whose monuments had ceased to be respected: the exact position in which they occurred among the *débris* was not identified. It may here be mentioned that the excavation, which occupied a month, was conducted

rarium Septentrionale as a Roman sacellum for the custody of the Ensigns of the Legions. It was "made without cement, but so composed of rough stones that part of every upper one is in a manner locked within the lower, so that the whole work mutually joined supports itself by the weight of the stones from top to bottom, growing narrower by degrees from below towards the summit, where the fabric is open." Quoted by Gordon, p. 27, from Buchanan's Hist. Scot. I.

Arthur's Oven was 19½ ft. in internal diameter, and 22 ft. high. The aperture at the top was 11½ ft. in diameter. Arthur's Oon, corruption of the Gaelic Ardhè-nan-Suainhe: Ardhè = Locus excelsus: Suainhe = Insignia. Arthur's Seir, between Murray and Ross=Ardnan Seir. Arthur's Seat. Ardhè-nan-Saidhè, signifying a convenient high ground to shoot from with bows and arrows. Gordon, p. 31.

[5] The subject was first brought before the Institute by Dr. Bruce, Dec., 1863; Arch. Journal, vol. xxi. p. 87. See also Ancient British Sculptured Rocks of Northumberland; by George Tate, F.G.S., Alnwick, 1865. Archaic Sculpturing of cups, circles, &c., upon rocks in Scotland, and other countries: by Sir J. Y. Simpson, Bart., M.D. Edinburgh, 1867; an Appendix to the Proceedings of the Antiquaries of Scotland, vol. vi.

Interior of the Chamber, Tapeck.

From a drawing by Col. Joseph Dundas, F.S.A. Scot.

by a very intelligent bailiff, and visited nearly every day by the writer or the proprietor. It is scarcely possible that interior walls, such for example as those of the Picts' House

Querns, balls, and stones marked with circles. Found near the centre of the floor.

at Kettleburn, could have escaped detection, or that any vertical fall of material from above could have obliterated them. The face of the wall exhibits no signs of the bonding in of cross walls, being perfectly smooth and continuous.

About a handful of small bones in a very decayed state were collected. The floor towards the centre exhibited clear marks of fire, consisting of burnt clay mixed with a little charcoal. Two iron axe-heads were found, of which one may have been of an ancient period. One pair of querns, and three single stones turned up among the *débris;* some small fragments of coarse pottery, three or four clay saucers of the rudest kind, egg-shaped stones, mostly formed of pudding stone, three whorls, such as are used with the distaff; some perforated clay-balls, a perfectly good and polished hone-stone, and last, not least, a perforated slate marked with scratches which suggest the idea that the matrons of the period sharpened their needles upon it.

It is, I think, clearly shown that the builders of this structure had the command of metallic implements. The large door-posts, and many other masses, are too regularly shaped to have been cut in any other way; but a more convincing proof is afforded by one of the large stones of the *vallum*, which has four deep notches in it, evidently cut preparatory to splitting it; three of them are in one line,

the fourth is at right angles to it. They are all precisely of the size and shape which would be cut by an ordinary kelt or palstave, and could not have been cut by any sort of stone implement. The work seems connected with a line of similar works running parallel to the wall of Antoninus, at three or four miles distance, and has all the character of a frontier fort, or defensive retreat. But the Pictish frontier was far in advance of this line in the fifth century, and behind it in the second. It seems, therefore, legitimate to conclude that it belongs to the period between A.D. 170 and A.D. 426, when the British held this line, and that it was constructed by workmen who had learned their art from the Romans.

SEAL SET WITH AN INTAGLIO OF LAOCOON, USED BY THOMAS COLYNS, PRIOR OF TYWARDRETH, CORNWALL, EARLY IN THE SIXTEENTH CENTURY.

By C. W. KING, M.A.

WHEN Goethe, for the first time in his life, had the opportunity of studying a collection of antique gems (in the Hemsterhuis cabinet), the impression which, at the very outset, forced itself upon his mind was, "that here it was also undeniable that copies of great, important, ancient works, for ever lost to us, are preserved, like so many jewels, within these narrow limits; hardly any branch of art wanted a representative amongst them; in scarcely any class of subjects was a deficiency to be observed." I have elsewhere (Handbook of Engraved Gems, p. 45) adduced several examples that have come under my own observation in the pursuit of the same study, which amply corroborate this opinion of the acutest of German critics; and I have there described gems which are the only things preserving the memory of the, in their day, wonders of the world, the masterpieces of Canachus, Apelles, Lysippus, and Leochares. Gems, to the same extent as coins, have carried down to our times exact ideas of such marvels of art, or monuments of pristine creeds, like celebrated statues of deities, as were from their nature objects of popular *worship* to the communities issuing the coins stamped with their figures; but gems go far beyond this limit, and in this very field of creative art claim an infinitely more extensive dominion. To say nothing of Painting (which has bequeathed little to us by the way of numismatics), the Glyptic art has, from the very beginning, especially delighted in rivalling her elder sister, Sculpture, and in perpetuating, in miniature, those performances of hers that recommended themselves, not by the traditional sanctity only of the object, but by their intrinsic merit and beauty, or by the celebrity of their authors. To the same causes is

it due that engraved gems are almost the sole means enabling us to form a notion of the more essential principles of ancient Painting—its rules of composition and design in its best days—which otherwise would have all but entirely perished, inasmuch as vase-painting, which would otherwise have preserved their remembrance in a yet more complete manner (as our lithographs do the pictures of modern times), was in rapid decadence before historical painting had truly commenced; whilst, on the other hand, the frescoes of the later ancients, copies of these masterpieces, have long since shared their fate, their scanty, half-obliterated remains, like the Pompeian, being merely sufficient to assure us of the immensity of our loss.

But gems possess a further value of their own. Besides summoning up before us the beauteous spectres of what has passed away for ever, they have the practical advantage of empowering us rightly to understand that which has survived the wreck of ages, though with a maimed and mutilated existence, which too often has suffered as much from the injudicious friendship of modern restorers, as from the hostility of accident, or from old iconoclastic fanaticism.

Of all such glyptic traditions of the original state of memorable works of art, none has hitherto been brought to light so replete with interest to all lovers of art, equally with archæologists, as the little relic forming the subject of the present memoir,—an interest derived from the important service it lends towards the true restoration of, perhaps, the most celebrated and remarkable of all extant remains of ancient sculpture. For the knowledge of this monument, almost as deserving of notice from the circumstances of its preservation, as from its special value in the subject under discussion, I am indebted (as on many former occasions of the like nature) to the kindness of Mr. Albert Way, who lately communicated to me the impression of the private

seal[1] (here figured double original size) of Thomas Colyns, Prior of Tywardreth, from A.D. 1507 to 1539. This signet was set with an antique intaglio (on sard, as its style of cutting seems to indicate), a spirited though minute reproduction of the famous group of the Laocoon. In my own judgment, based upon the long-pursued comparative study of ancient Glyptics, the work of this intaglio exhibits nothing of the style of the first quarter of the Cinque-cento, so easily recognizable in its treatment of complicated designs like this,[2] nor even of the Roman imperial school, but rather possesses every characteristic warranting its ascription to the best period of Greek art in this particular branch, viz., the two centuries commencing with the era of Lysippus and Pyrgoteles. It is necessary thus to premise with the confession that the antique origin of the work is to a certain degree only conjectural, resting as it does upon critical decisions, not upon chronological data that render its authorship (Greek or Roman) a matter beyond all dispute, which would have been the case had the Cornish prior, its last owner, flourished within the preceding century, when gem-engraving yet slumbered, together with the Laocoon, amidst the dust of the perished empire. For the marble group, its prototype, was disinterred as early as 1512 from its burial-place on the Esquiline, by Felix de Fredis, who still "glories in death" in the discovery, says his epitaph in the Ara Celi. Hence there is a *possibility* sufficient to disquiet the faith of those incompetent, from want of special knowledge of the art, to appreciate the evidence borne by the gem itself to its own Hellenic parentage, however sufficient the same may be to connoisseurs, that Colyns, who is known to have had transactions with the Apostolic See under Leo X., *may* have procured for his own delectation a gem-copy from the newly-discovered and far-famed sculpture, done by some clever hand among the innumerable rivals of Valerio Vicentino

[1] Attached to a document now in the possession of Lord Arundell of Wardour. We are here indebted to the researches of our friend Mr. Smirke, whose investigations of documentary evidence and of ancient remains in the Western counties have frequently contributed to the gratification of the Institute. The grant to which the signet of Prior Colyns is appended was brought to light at Wardour Castle by Mr. Smirke. The intaglio of Laocoon is noticed by him in Dr. Oliver's Monasticon, additional Supp., p. 5. See the memoir of Colyns, Monast. Dioc. Exon., p. 35.

[2] Whoever has examined with an experienced eye the miniature groups of the greatest proficient in this line, P. M. da Pescia, the friend of M. Angelo, will at once perceive that our Laocoon displays a totally different *technique* in the mode of its execution.

flourishing there at the time, when "si ne era cresciuto si gran numero che era una meraviglia," as Vasari tells us, that is before the fatal sack of the city in 1528. This uncertainty is increased by the unlucky absence of any date from the document; one prior or shortly subsequent to 1512 would have settled the question in favour of my position; but it will be perceived that Colyns lived and *sealed* for many years after the discovery of the marble. Another consideration must be taken into the account. Before the discovery of the impression which forms the subject of this inquiry, no *antique* representation of the Laocoon group had ever made its appearance. Nothing of the kind is to be found in Winckelmann's Catalogue of the immense and all-comprehensive Stosch collection (confined to antiques); and although Raspe, in his Catalogue of Tassie's casts, does put down eight repetitions of the group in gems, yet, as he gives the post of honour amongst them to that signed by Flavio Sirletti (1700-37), it may safely be concluded that he regarded the rest as modern performances, and of trivial importance.

Having now, as candour required, stated the weightiest objections that occur to me as possible to be brought, with any show of reason, against my own decision in the case, the next step is to produce confirmatory evidence in its favour; and such evidence is most unexpectedly furnished by a single particular in the seal, rendering testimony of the utmost value on my side when it comes to be dispassionately examined in all its bearings upon the question. The intaglio *differs* from the marble group, as we see it *at present* (besides some minor details), in one grand point,—the action of the right hand of the father. He appears on the wax attempting, with his right arm *bent*, to tear away the head of the serpent from his throat, into which it has already fastened its fangs, whilst at the same time he vainly averts his face from its attack. Now in the marble the action is totally different: Laocoon *extends* the same arm at full length, and forces away from him merely a fold of the serpent's body, the head of which appears much lower down. Singularly enough, one of our first living sculptors recently pointed out (to my informant contemplating the group in his company last winter at Rome) this very action of the principal figure, as being not merely unmeaning, but positively detrimental

to the force and expression of the whole design. But the discrepancy is easily explained. This portion of the marble was wanting upon its discovery, and was immediately restored,—by M. Angelo, as the story, of course, goes,—consistently with his own false conception of the original attitude.[3] Nevertheless, a small projection is still visible on the neck of Laocoon, sufficient to have guided a more intelligent restorer to a better understanding of his duty, by suggesting the former adhesion of the serpent's bite in that particular place. For it will be perceived, upon the information of our gem, that the sculptor had, as his better knowledge of nature dictated, made his twin-serpents fasten their teeth on the two most mortal parts—the jugular vein and the region of the heart. Virgil himself beheld the attack made upon the head of the principal victim ; his Laocoon stands—

"Perfusus sanie *vittas* atroque cruore."

Now this very discrepancy demonstrates, in my opinion, that the gem-copy was taken when the marble was still perfect, and therefore before the date of 1512, and the Italian Revival. It is inconceivable that any Cinque-cento gem engraver should have presumed to restore the design in a sense so strongly differing from that sanctioned by the overwhelming authority of the "divine" Florentine ; or again, and what is more to the purpose, that having such audacity he should have exhibited so much superior an intelligence in his conjecture than the greatest of modern artists. This last is a moral argument, and derives its weight from other considerations than those of art criticism, but it appears to me irresistible when backed by the evidence afforded by the technical execution of the intaglio itself, worked out, as the impression, though dulled and wasted by time, unmistakably shows, almost entirely with the diamond point, that grand agent of the best masters in ancient Glyptics, but totally unknown to their emulators of the Cinque-cento school.

To attribute a *Grecian* origin to the copy of a sculpture believed by a large section of the antiquarian world[4] to have been executed in Pliny's own times, certainly demands some explanation on my part. A few remarks therefore, or rather

[3] Most likely being misled by Virgil's expression (*Æn.* II. 220) :—
"Simul manibus tendit divellere *nodos*."

[4] Headed by Thiersch in his "Epochen der bildenden Kunst."

a contribution of fresh conjectures towards the elucidation of this long disputed question, will probably not be thought out of place as a conclusion to this notice. The soundest mode of approaching the subject is to examine the actual words of Pliny, in which the conflicting opinions discover equally good grounds for the most discordant conclusions. "Quorundam claritati in operibus eximiis obstanti numero artificum, quorum nec unus occupat gloriam, nec plures pariter nominari possunt; sicut in Laocoonte qui est in Titi imperatoris domo, opus omnibus et picturæ et statuariæ artis præferendum. Ex uno lapide eum ac liberos draconumque mirabiles nexus de consilii sententia fecere summi artifices, Hegesander et Polydorus et Athenodorus Rhodii. Similiter Palatinas domos Cæsarum replevere probatissimis signis Craterus cum Pythiodoro, Polydeuces cum Hermolao, Pythiodorus alter cum Artemone, et singulariter Aphrodisius Trallianus." (xxxvi. 5.)

The point in dispute is whether Pliny meant to imply that the three Rhodian partners executed this unrivalled group at the commission of Titus, as those named in the next sentence are beyond all question mentioned as working for the preceding Cæsars, "whose palace they filled with their own highly-approved sculptures;" or whether he merely cites the Laocoon as "then standing in Titus's palace," but the work of artists belonging to a much earlier period, perhaps to the school of Lysippus, to which the majority of critics at present refer them. The latter interpretation of the passage seems to me the true one. Pliny's prime object in quoting the Laocoon was indubitably the same as for quoting the *names* of the then *modern* sculptors in the passage following: to substantiate the assertion with which he starts, "that the copartnership of artists in a work, however meritorious the result, deprives them individually of the credit they deserve." This he shows by examples, taken as the natural mode of arguing in similar cases suggests, from both old and recent experience; adducing the Laocoon as the most conclusive instance in the former class (probably on account of some special predilection of his patron Titus for that piece), and the very praiseworthy modern sculptures decorating the edifices on the Palatine as proving the same unwelcome truth in the case of artists of his own times. It is clear to me that the Laocoon is

adduced for no other reason than as being the most conspicuous example known to the historian of a great sculpture produced by a partnership of artists. The very expression laid hold of to prove its recent execution,—"now standing in Titus's palace,"—has a contrary effect on my judgment, for it sounds more applicable to an old work transferred from another destination, than to one just completed for the place it filled; whilst the "similarly" commencing the next sentence infers a comparison between the Past and the Present. Pliny evidently considered that the highest claim of the Laocoon group to admiration was the cutting of the whole out of a single block, for a little above he has pointed out the same circumstance in the masterpiece of a certain Lysias —an Apollo and Diana standing together in a *quadriga*—a piece so much esteemed by Augustus that he had *selected* it (which proves it an older and not Roman work) to adorn the arch erected by him to the memory of his father, Octavius.

This notice of the group by Lysias, equally elaborate in its details with the Laocoon, may serve to throw light upon the original destination of the latter work—to adorn the pediment of a temple of Apollo—as the very nature of the first-named piece of sculpture assures must have been the case with *it*. The appropriateness of the subject for such a position, though not obvious at first, is however completely established by the explanation Hyginus gives of the cause of the miraculous destruction of Laocoon. He was the priest of Apollo, but had sacrilegiously polluted by incontinence the shrine of the pure god of Light. This tradition also accounts for the choice of the particular ministers of divine vengeance, the serpent being Apollo's most noted attribute.[5] On the other hand, the "*earth-born* dragon" had nothing to do with Neptune, to whom Virgil, compelled by his plot, ascribes its mission, both as being the arch-enemy of Troy, and desirous to punish Laocoon for having profanely struck the *horse*, peculiarly sacred to that god as the actual creator of the animal.[6] The punishment of Laocoon therefore, exhibited in life-like horror above the entrance to the temple of

[5] The Pythian Oracle is commonly expressed on gems by a column entwined with a *serpent*, and supporting a raven, Apollo's own prophetic bird.

[6] Hence the sea-faring Carthaginians, and, after them, the Saxon pirates, took the horse for the national cognizance.

Phœbus, read an awful lesson on the necessity of purity to priests and votaries alike. The choice of marble instead of bronze for the material of so complicated a design as this, which by its nature falls rather within the province of *statuaria* in metal than of *sculptura* in stone, is at once accounted for, if my idea concerning its proper destination be accepted. All intelligent readers of ancient notices of works of art will have perceived that for statues intended to be honoured *by* mortals, or to do honour *to* mortals, in the form of gods or memorial-figures of distinguished men, *metal* was regarded as the only appropriate medium, partly from traditional usage as having been the first to be so employed, partly from its superior costliness. Dædalus and Learchus and their disciples, with their figures in hammer-wrought bronze, preceded by many generations Scyllis and Dipœnus, the Cretan inventors of sculpture in marble.[7] Praxiteles is noted by Pliny as a remarkable exception to the rule, and to have done his best in marble, "marmoris gloria superavit etiam semet." But for *architectural* decoration, necessarily meant to be viewed from a distance, and where the utmost conspicuousness was the greatest recommendation, marble was with good reason preferred to bronze. Its brilliant white,[8] yet further enhanced by the accustomed tinting of the background, rendered all its details distinguishable at the greatest distance from which they possibly could be viewed. No instance occurs to my recollection where the pediment or frieze of a temple is mentioned as decorated with whole figures, or with *rilievi*, in metal. The group of the Laocoon would be with equal propriety chosen to fill the tympanum of a temple of Phœbus as that of Niobe and her children, teaching another moral, to decorate one consecrated to his goddess sister.

Any one with a tincture of ancient art who reads Virgil must often have been struck, and then highly interested, with the scrupulous anxiety the very erudite poet manifests to have good ancient authority for all his descriptions. One often *feels* that he is transferring into his verse almost servile copies of the paintings and sculptures by the great masters of old Greece then accumulated around him in the

[7] Who, migrating to Sicyon, first practised the new art there about Ol. 50, B.C. 650 (Plin. xxxvi. 4).

[8] Its name comes from the same root as μαρμαίρειν "to shine."

palaces of his patrons at Rome. Here and there the pictorial representation has had such overpowering charms for him that he introduces it as an incident somewhat clumsily incorporated with the rest of his story, like the defence and fall of the wooden tower at the taking of Troy. That he had admired some ancient representation of the fate of Laocoon, no one can doubt after reading his truly pictorial description of the scene; but that he drew his inspiration from the very sculpture we still possess is by no means so certain. There is one notable variation in his account of the mode of attack of the serpents from that adopted by Hegesander and his colleagues: in his verse they make a double coil around the throat and body of the father, and tower aloft over him with their heads and necks :—

> "Bis medium amplexi, bis collo squamea circum
> Colla dati superant capite et cervicibus altis;"

whereas, in the sculpture, they leave their victim's neck entirely free, and make no attempt at suffocating him in their coils. Again, Virgil makes them *devour* the two boys before they attack their father :—

> "Corpora natorum serpens amplexus uterque
> Implicat, et miseros morsu *depascitur* artus."

A child destroyed by a serpent must have been a very favourite subject with the Greek sculptors, to judge from the frequency with which the "Death of Opheltes" is reproduced upon gems; for it is an article of faith with me that no fine gem-work was without a more celebrated prototype in statuary. The subject was recommended to ancient taste not so much by the importance of the legend it commemorated as by the opportunities it afforded to art in the contrast between the rounded and the attenuated contours of the victim and of the destroyer, and equally for the graceful convolutions into which the coils of the latter could naturally be thrown. Curves and spirals had a special charm for the Grecian eye, as the decoration of the painted vases alone proves to demonstration. Why the Laocoon group should not, in any previously-known example, have been taken for his model by the gem-engraver (a fact containing the sole grave objection against the antiquity of the work before us) admits of satisfactory explanation to those

experienced in ancient Glyptics. Gems of the best period, as a rule, present only a single figure, very rarely do they admit more than two; to inclose the multiplied details of an entire picture within their narrow limits, was reserved for the misplaced and unsuccessful ingenuity of the Cinque-cento school. The ancient engraver knew the capabilities of his art too well to strain after such impossibilities, and never attempted a miniature reduction of a complicated group unless in some special cases where he was induced by the equal importance of every member of the composition as in his oft-repeated copies of the far-famed masterpiece of Eutychides, the τύχη πόλεως of Antioch, in which the City seated on the Orontes, her founder Seleucus, and the attendant Victory all form one inseparable whole. When the story of Niobe for example is represented on a gem, it is sufficiently told by the introduction of no more than the two principal figures, the mother shielding her child; the escape of Æneas from Troy, by himself carrying his father (which is only equivalent to a single figure) and his little son grasping his hand. Unquestionably therefore the reason was a very sufficient one, that so happily induced the old engraver to break through the rule of his art and daringly transfer this very elaborate composition to the gem that the tasteful Prior of Tywardreth was fortunate enough to obtain for the embellishment of his private signet, of which the half-effaced impression has alone transmitted to us the correct idea of one of the most important existing monuments of antiquity.

Original Documents.

CONTRACT FOR BUILDING A HALL AT HAMMES, OR HAMSEY, SUSSEX, 14 EDWARD II. (A.D. 1321), FROM THE MUNIMENTS OF THE DEAN AND CHAPTER OF WESTMINSTER.

Contributed by Mr. Joseph BURTT, Assistant Keeper of the Public Records.

We are indebted to the kind courtesy of the Dean and Chapter of Westminster for the opportunity of presenting the following interesting document to our readers. The deed is doubtless found among the archives of the Abbey of Westminster by some accident, as the Abbey possessed no property at Hamsey; it held much elsewhere which came through the Say family, and in transferring the title deeds of some of the estates, those relating to Hammesay, situated in a parish near Lewes now known as Hamsey, were probably unintentionally handed over with them.

The Say family came to England with the Conqueror and held lands in various counties. The first notice of the De Says in connection with Sussex is in the 26th of Henry III., when, according to the "Testa de Neville," William de Say held fourteen knights' fees in Hammes, "de Honore de Warrenne." In the reign of King John the De Says reached the height of their distinction, Geoffrey de Say being one of the twenty-five barons on whom devolved the responsibility of ensuring that the king observed the stipulations of Magna Charta. Geoffrey was succeeded by William de Say, A.D. 1231. William was on the king's side in the barons' wars of the reign of Henry III. He died in the 56th year of Henry III., leaving William his son and heir. This William died 23 Edward I., leaving his son Geoffrey seised of the manor of Hammes among his other possessions. Geoffrey, in 34 Edward I., was engaged in the Scotch war. The following document was executed by him in the 14th year of Edward II., and he died in the following year. The date of his death is not mentioned in the Inquisition taken upon his decease.[1]

The document which follows is of considerable interest for the illustration of the Domestic Architecture of the Middle Ages, as such contracts for the actual building of manorial residences are exceedingly rare. It shows that the terms now in use are the same that were employed in the time of Edward II., those terms being in Norman French.

Of the building itself no remains now exist, though the site is still

[1] See Sussex Archæol. Collections, vol. xvii. p. 70, from which many of the particulars above given are taken. The history of the De Says, however, there detailed omits one generation; the Geoffrey de Say, who built the Hall at Hammesay, and upon whose death the Inquisition was taken in 15 Edward II., and who then left a son seventeen years' old (Escheats 15 E. II., No. 41), could not be the Geoffrey who had livery of his lands in 19 Edward II. The son, however, would then be of age. The recurrence of the same Christian name doubtless caused the oversight.

visible. It stood at the east end of the church, from which it was only divided by a road. Mr. Elliot, writing to Sir William Burrell in 1777, said that within his memory "the foundations of the outer walls of the ancient house were visible, but are now wholly removed, and the area of the buildings, containing rather less than half an acre, is ploughed by the tenant, who told me that the plough had dragged up several parts of the old stone window and door-cases, now appropriated to other uses."

The mason who covenanted with Sir Geoffrey to erect the Hall at Hamsey, is described as of "Wogham," namely, Offham, an adjacent village, of which the name was anciently written Wougham, Oakham, or Woham. The position of the manorial seat of the De Says, as described by Mr. R. Chapman, in his Parochial History of Hamsey, in the Sussex Archæological Collections, appears to have been well chosen for defence, being protected on the north by a steep embankment rising almost perpendicularly from the River Ouse, which supplied the purpose of a fosse or moat on all sides except the west, and on the west the mansion was approached by a rising ground.

Coste endenture tesmoigne qe le sisme jour de Martz lan du regne nostre Seignur le Roy Edward fuiz au Roy Edward quatorzsime issi acouint entre Monsieur Geffrei de Say, chivaler, de une part, e Johan Rengwyne de Wogham, mason, de aultre part, ceo est asavoir qe le avauntdit Johan fra en le Manoir le dit Monsieur Geffrei de Hammes quatre murs de pere e de chaux pur une sale, des queux les deux murs de les costeres serrount sessaunte pees de long deins les murs, e vinttequatre pees de haut de la plaine tere; e les deus boutz serrount gables de tele longure qe la sale soit deins les murs de trentesis pees de lee, e de tele hautesse come le comble de la sale voudra suffire. E le dit Johan fra en la gable vers le West, qe serra au deys de la dite sale, une chimenee qe avera de leour deins les ganbes sesse pees, e en la costere de la dite sale devers de suth une aultre chimen . . . . . nef pees de lee, e les tuels de ambedeux les chimenees passerount de haut le summet de la sale treis pees. E le dit Johan fra en la cosfere de la dite sale devers le North treys fenestres croyses, cheskune sis pees de lee e de aultre tele hautesse come les murs porront suffire, e en la costere devers le Suth serra le us de la sale de covenable leour e hautesse, e deus fenestres acordauntz as fenestres de la costere du North. E en la gable devers le Est serrount treis us, une pour la panetrie, une aultre pur la botelerie, e le ters pur une alee devers la cusine. E auxi le dit Johan fra un mur de pere et de chaux a sesse pees du but de la sale de trentesis [pees ?] de loung e dis pees de haut pur receivre un pentis qe serra outre la panetrie e botelerie, e un us en mylu pur lissue devers la cusine, e les eles acordauntz al costere del comble, e en cheskune ele une fenestre covenable. Estre[2] ceo le dit Johan foera,[3] treera e tailiera toute la pere qe covendra pur les avauntditz murs, us e fenestres, e chimenees, en toutes les places ou le dit Monsieur Geffrei voye qe soit a son profit, horspris la pere qe serra pur lastre[4] e le reredos des avauntditz

[2] Estre, *hors, extra;* besides; Kelham.

[3] Fouir, *fourrer. fodere,* to dig, to quarry stone, &c. Kelham gives *foer* and *foder* in this sense; *foiance,* digging.

[4] Atre, astre, le foyer, possibly from *atratus,* blackened, begrimed. See Roquefort. The material required for the hearths may have been procured from some greater distance than the other stone, possibly from the quarries of firestone near Reigate or Blechingly, and hence the exceptional clause in regard to its conveyance.

chimeneis countre le feu ; e le dit Johan foera sablon pour tutz les avauntditz overaynes, e trovera chaux a ses custages, auxi ben pour les dites overaines come pour le coverir de toute la sale ove le pentys. E lavauntdit Monsieur Geffrei fra car . . . . toute la dite pere, chaux, e sablon sur la place on la sale serra faite ; e dorra au dit Johan, pour son overayne e tutz aultres custages susditz trentecink mars e un quarter de furment, e ly paera de moys en moys solom le espleit de son overayne, commensaunt al my quaremme prochein apres la date de cest escrit avenir, issi qe tutz les avauntdit murs e les aultres overaynes soyent parfaitz, e lavauntdit Johan de son covenaunt purpae deins un an e demy prochein suivant le terme susdit. E a tutz cestes choses ben e loialment faire e acomplir le avauntdit Johan ad trove pleges, ceo est asavoir, Williame atte Rye e Richard Page, qe ensemblement ovesqe lavauntdit Johan obligent eux, lur heyrs e lur executurs, e tutz lur beins e chateux, ou qil soyent troves, a la destreese cheskun ministre nostre Seignur le Roy ou aultre bailif qe lavaunt . . . . Monsieur Geffrei voudra a ceo elire. En tesmoinaunce de queu chose les avauntditz . . . . . Williame et Richard a la partie de ses escritz [qe ?] demurt devers Monsieur Geffrei unt mis lur seaus, e a la partie qe demurt devers lavauntdit Johan lavauntdit Monsieur Geffrei ad mis son seal. Donne a Hammes, lan et jour susditz.

[Two labels for seals, on one of which is a small seal, broken.]

A translation of the foregoing instrument may be acceptable to some readers who are not familiar with the technical terms that occur in it. A literal version, for which we are indebted to one of our highest authorities in all subjects connected with Domestic Architecture is, accordingly, here given—

"This Indenture witnesseth, that on the sixth day of March, in the fourteenth year of the reign of our Lord King Edward, son of King Edward, it was thus agreed between Sir Geoffrey de Say, knight, on the one part, and John Rengwyne of Wogham, mason, on the other part ; that is to say, that the aforesaid John shall make on the said Geoffrey's manor of Hammes four walls of stone and chalk for a hall, of which the two side walls shall be 60 ft. long on the inside and 24 ft. high from the ground, and the two ends shall be gables of such a length that the hall within the walls shall be 30 ft. in width, and of such height as the roof of the hall will permit. And the said John shall make in the gable towards the west, which shall be at the dais of the said hall, a fire-place which shall be 6 ft. in width within the jambs, and, on the side of the said hall towards the south, another fire-place of 9 ft. in width, and the shafts of the two chimneys shall be carried 3 ft. above the roof of the hall. And the said John shall make in the side of the said hall towards the north three windows with transoms, each 6 ft. in breadth, and of such a height as the walls will permit ; and on the side towards the south there shall be the door of the hall, of convenient width and height, and two windows agreeing with the windows of the north side ; and in the gable towards the east there shall be three doors, one for the pantry, another for the buttery, and the third for a passage to the kitchen. And also the said John shall make a wall of stone and chalk at 6 ft. from the end of the hall, of 36 ft. in length and 10 ft. in height, to receive a pent-house, which shall be over the pantry and buttery, and a door in the middle for the passage to the kitchen, and the aisles according to the side of the roof, and in each aisle a convenient

window. Besides which the said John shall dig, draw, and cut all the stone that shall be required for the aforesaid walls, doors, windows, and fire-places in all the places where the said Sir Geoffrey sees it to be to his advantage, except the stone which shall be for the hearths and the backs of the said fire-places against the fire. And the said John shall dig the sand for all the aforesaid works, and shall find lime at his charge as well for the said works as for covering all the hall and the pent-house. And the said Sir Geoffrey shall have carried [the original is here slightly damaged] all the said stone, lime, and sand on to the place where the hall shall be made; and he shall give to the said John for his work, and all other expenses aforesaid, thirty-five marks and a quarter of wheat, and shall pay him from month to month according to the progress of his work, beginning at Mid-Lent next coming after the date of this writing; so that all the aforesaid walls and other works shall be finished, and the said John be discharged of his covenant, within a year and a half next following the term aforesaid. And to do and accomplish all these things well and lawfully the aforesaid John has found pledges, to wit, William at Rye, and Richard Page, who, together with the aforesaid John, bind themselves, their heirs, and executors, and all their goods and chattels wherever they may be found, to the distress of any officer of our Lord the King or other bailiff that the aforesaid Sir Geoffrey shall choose for the purpose. In witness whereof the aforesaid William and Richard have put their seals to that part of these writings remaining with Sir Geoffrey, and to that part which remains with the aforesaid John the said Sir Geoffrey has put his seal. Given at Hammes on the day and year aforesaid.

Proceedings at Meetings of the Royal Archaeological Institute.

November 2, 1866.

The Very Rev. Canon Rock, D.D., in the Chair.

On commencing a fresh session of the meetings of the Institute the chairman adverted with great satisfaction to the annual meeting which had just been held in the metropolis with such considerable success. The papers read had been far above the average, and many of them had been remarkable for their very superior quality, while the excursions had been most successful. The numbers attending the meeting had also been very considerable, and the whole affair had contributed much to the credit, and to the funds of the Institute. With this preface the chairman expressed his deep regret at finding himself in the position he occupied, as it was owing to the great loss the Institute had sustained in the sudden death of the Marquis Camden. The Marquis had contributed much to the success of the London Meeting by his kind attention to the business in hand, and had he been spared to do so, he would have been able to speak most heartily of the success of that meeting on opening the present session. The chairman felt sure that those present would join him in the expression of his profound grief at the event which had occurred. While the late Marquis was ever ready and able to appreciate most highly the value of archæological pursuits, he continued always to put himself forward only as a learner. Ever most courteous and kind to all, he was especially so to the members and friends of the Institute. As they had so often the pleasure of witnessing, he presided very frequently at their meetings, and he was most attentive to all the interests and affairs of the Institute. His last public act in connection with them—only a few days before his lamented decease—had been to obtain her Majesty's gracious permission to prefix the word "Royal" to their title. The vacancy in the office of President produced by this sad event, had caused the council to fall back upon their valued and most able friend, Lord Talbot de Malahide, whom he had good reason to hope would resume for a time the office he had formerly so well filled. During the session that was beginning that office would be no sinecure, for the President of the Institute would be an *ex officio* member of the council of the great Paris Exhibition next year. As regards that Exhibition, he (the chairman) was glad to see that our French friends were taking a leaf out of our book, and that there would be a "Loan Exhibition" of objects similar to that which had obtained such fair fame at South Kensington. He trusted the members would support the council of the Institute in the

attempt they were making to give some information beforehand upon the objects to be exhibited and the papers to be read; this could only be done by the members sending such information in good time. In conclusion, the chairman congratulated the Institute on the auspicious opening of the session, which had brought together so large, so valuable and curious a collection of objects as that on the tables before him.

The Rev. PREBENDARY SCARTH communicated an account of an ancient interment discovered in the Sydney Gardens, Bathwick, Bath, a few months ago. In August last workmen were engaged to gravel the playground of the Bath Proprietary College. This forms a part of Sydney Gardens, having been enclosed out of them, and is at the back of the college, which was once the Pulteney Hotel. Gravel underlies the surface, and is easily obtained by clearing off the soil. During the vacation a pit was opened about twenty yards behind the college, and in the playground, when at a depth of about 10 ft., the men came upon two stone coffins. Unfortunately the lids were broken before the nature of the deposit was known, but on lifting the broken portions two coffins were found lying parallel. In one was a human skeleton in a perfect state, in the other the head of a horse. The coffins were almost equal in size. It being vacation time, no one was on the spot to give directions about removing the coffins or preserving the remains, and the contractor for the work in hand forthwith covered all up again. They were examined only by the college porter and the men employed. On being informed of the discovery on his return to Bath, Mr. Scarth ascertained the above particulars. This discovery agrees with what has been found in other places in the immediate neighbourhood, as well as other localities. At Combe Down, a mile south of Bath, stone coffins were found lying parallel to each other, and near them a stone box about 1½ ft. long, containing a horse's head. An account of this discovery is given in the Journal of the Somerset Archæological and Natural History Society for 1854, with drawings. The objects are now in the Bath Museum. At Locksbrook, about a mile and a half from Bath, on the west, interments were found in stone coffins, also a stone box containing burnt bones. Skeletons were also found in a gravel pit close by, and with them the skeleton of a horse (Aquæ Solis, p. 103). There are other records of similar discoveries near Bath. Stukeley says that about Chute bones have been dug up plentifully, especially in a field called Blood Field. A stone coffin was found there with a skeleton enclosed, and an arrow and spear-head of bronze, and a horse was found buried about three yards from the body. But another circumstance renders the discovery in Sydney Gardens very remarkable. In February last, when digging gravel just beyond the paling between the gardens and the college, and about 30 yards from the later discovery, was found what appeared to be a place for cooking food. Stones placed on end supported flat stones, and under them were wood ashes and evident marks of fire. Fragments of pottery of divers kinds were also found, together with flint arrow-heads. These remains are now in the Bath Museum. The position of these remains close to the interments suggests the idea of a funeral feast, which may have accompanied the burial. Various other interments have been found in Sydney Gardens. Burials have been found all along the side of Bathwick Hill. One coffin had in it the skeleton of a female, packed in fine white sand, and parallel to it was another with the remains of a child in coarse sand. The Romans, and those who succeeded them in Bath, seem to have carried their dead

across the river, and buried them along the side of the hill opposite to the city. Burials on the slopes of hills are found elsewhere. As to the horse's head accompanying the interment, the following passage from Mr. King's book on "The Gnostics" may be thought appropriate:—"The idea of death is conventionally represented on sarcophagi and sepulchral tablets by a horse's head looking in through a window upon a party feasting. Yet more forcibly is the same notion carried out in an Etruscan sculpture, where the demon Charon, armed as usual with his large mallet, is leading the horse on which sits the defunct, his face muffled up. This perhaps is the cause why the horse's head is so favourite a device for signets. It served the bearer as a *memento mori*, like the death's head so much in fashion in the jewelry of the cinque-cento period, and with a far other object in the antique examples. One may conjecture that such was the source of the immemorial custom in South Wales of the mummers carrying round a *horse's skull* in Christmas merrymaking."

In the interments described may be the origin of the signet engravings, and the custom may have been that at the funerals of great men the horse, which had been their companion, shared their fate in death. Many such interments may be found, and they are believed to be far from uncommon, and to be unconnected with any locality.

Instances of somewhat similar interments were adverted to by Mr. Hewitt, who spoke of that mentioned by Mrs. Piozzi in the account of her travels in Italy; by Mr. J. Yates, who mentioned that recorded by Homer; and by the chairman, who, in the course of his remarks, mentioned that on the Continent a feast was a regular part of the ceremonial at a burial, and adverted to the ancient belief that the horse conveyed the body of the deceased to the banks of the Styx, over which Charon ferried him.

Lieut.-Colonel A. Lane-Fox, F.S.A., then read the following account of the objects exhibited by him, and which had been found at a great depth in the vicinity of the old London Wall.

"The excavations which are now in progress for the extension of the wool warehouse of Messrs. Gooch and Cousens in the London Wall have brought to light a number of interesting relics of the Roman period. The hole dug for the foundations of these buildings commences at about forty yards south of the street pavement, which is supposed to occupy the site of the old wall, and the excavations are consequently within the area originally enclosed by it. At about 16 ft. from the surface a layer of gravel is found, consisting of small stones, and sand resembling the Thames ballast, which has all the appearance of being a natural deposit; but as the hole does not extend for more than a foot below this, it is difficult to determine whether this is the case, or whether the made earth may not in some places continue to a lower depth. Above this there is an irregular deposit of peat, varying from 3 to 8 and 10 ft. in thickness; and above this again, made earth and rubbish, consisting of the more modern *débris* of the city. The stratum, however, is irregular, so that it is difficult to give a general description of it beyond this invariable feature, that the peat overlies the gravel everywhere, and at an average depth of about 16 ft. The area excavated is an oblong of about 70 ft. by 200, running north and south.

"Throughout nearly the whole extent of this area, stumps of oak piles are found, distributed some in rows running east and west, but for the most part dotted about in irregular clusters without any apparent order. In

some places they are as close as from 12 to 18 in., in other parts they stand isolated. Towards the southern end a row of piles runs nearly across the excavation, and on its southern side close to the piles, as if binding them together, a long plank 1½ in. thick and about a foot in breadth has been laid transversely; another shorter row of piles and plank runs north and south. I cannot ascertain that any trace of nails has been found about them.

"The stumps are from 2 to 3 ft. in length, squared and roughly pointed as if with an axe, and from 5 to 8 in. in thickness. In those parts where gravel has been attained the points extend about 2 ft. into it, and are for the most part well preserved, but the tops of the stumps all present the appearance of having rotted off, probably at the original surface of the ground, and I could not ascertain that any trace of wooden superstructure was found above them. The whole collection of piles must originally have been driven down to nearly the same level; here and there large tiles, from 12 to 16 in. square and about an inch thick, were found interspersed amongst them, some showing traces of fire.

"Nearly all the articles exhibited were found in the superincumbent peat, at depths varying from 9 to 16 ft., either scattered in the peat, or collected in refuse heaps at various levels. These heaps were composed of large quantities of oyster, mussel, and cockle shells, all of recent species, mixed with pottery, the bones of animals, nearly all of which were broken, and a large proportion of them split lengthwise, as if for extracting the marrow. Having submitted the bones to Professor Owen, he has been so kind as to name them for me. They consist of the horse, the wild goat (Bouquetin), the wild boar, the red deer, and the *Bos longifrons* (earliest species of domesticated ox), and the skull of a dog, apparently of the shepherd-dog species. Higher up, at from 9 to 10 ft., horns of the roebuck were found, which Professor Owen informs me differ slightly from the existing variety in being more fully developed, and altogether better specimens of horns than those of the roebuck now inhabiting the Highlands of Scotland. Amongst the bones were also found numerous articles of human workmanship, including bone handles (?), bone points, bone skates, bone gouges, various kinds of Roman pottery, bone and bronze pins, a double-edged hatchet of iron, iron knives, a kind of short iron crowbar, a chisel, a merchant's mark, iron keys, pieces of bronze and lead, and coins of various kinds, from Antoninus Pius to those of George III. (in the surface ground).

"Unfortunately, I only heard of these excavations after the greater part of the peat had been cleared out, and I was therefore unable to ascertain the exact position of the several articles exhibited except by information derived from the workmen. More certain information upon this interesting point would have been desirable, and it is to be hoped that the excavations may have been watched by some careful observer, from whom a more detailed account of the different levels at which the several articles were found may be obtained. All I can say from personal observation is, that the bones of the several animals mentioned were found at all depths in the peat, from the level of the piles up to within 9 ft. of the surface, and that the pottery, including the Samian ware, was also found at the lowest depth; but, so far as my own observation goes, it did not rise to the level at which the roebuck's horns were found. With respect to the pottery, Mr. Franks, to whom I have shown the specimens found by me at the different levels, has been kind enough to inform me that the whole of it is of Roman manu-

facture. Some of it, the grey pottery, coated with black and ornamented with a kind of chevron pattern incised, is apparently from the Upchurch Marshes. Other specimens, of coarser pottery, is of the kind supposed to have been manufactured by the Romans on the site of St. Paul's Churchyard, and the remainder is Samian ware of foreign origin, one specimen of which appears to be stamped with the name of the potter MACRINUS.

"The so-called bone handles consist of the shank bones of the red deer and *Bos longifrons* cut through about the centre, and roughly squared at the smaller ends. One specimen appears to have been cut into an hexagonal form. They all have from two to four longitudinal cuts on the smaller end. The bone points are very roughly cut and hollowed at the base, as if to receive a shaft. One of the gouges has two transverse cuts upon its convex side, the object of which is not apparent. Another is filled up with a very strong cement. The skates consist of the metacarpal bone of the donkey or small horse. One specimen of these has been much worn by friction on the ice. None of the bones have lost their animal matter, which is in itself sufficient to prove them of comparatively recent origin. Some of the bones are quite green, probably from having laid close to some bronze implement.

"With respect to the use of these bone implements many conjectures have been offered; amongst others, that they were used for polishing, for net making, as shuttles, and that they were the handles and points of spears; which last would, from their construction, appear most probable were it not for the presence of Roman pottery, which makes it unlikely that such very primitive weapons should have been employed at a time when iron was in constant use. I have nothing further to add to these conjectures respecting them.

"It appears to me that there are but two alternatives to consider, supposing the time of their formation within the Roman era to be proved: firstly, are they Roman, and constructed for some manufacturing purpose? and secondly, being of the Roman period, may they not have belonged to a people essentially pre-Roman in their arts and appliances? Similar bones, I am told, have been found near the Bank, the Mansion House, and down to the river, and it seems probable the whole of this tract must have been swamp at the time the piles were driven into it. The presence of the oysters, cockles, and split bones, refuse from the kitchens, proves that the piles, in all probability, belonged to the foundations of inhabited buildings. Savages in all parts of the world appear to have had an affection for swampy ground, and it is not unlikely the Romans may have left them in undisturbed possession of it. If so, it is possible these relics may be vestiges of the ancient British inhabiting the marshy tracts about London during the Roman era.

"Should these observations have the effect of drawing the attention of archæologists to this locality before the piles are removed, it is possible that some more definite conclusions may be arrived at. At a time when the remotest quarters of the globe are being searched for the traces of lake dwellings, it appears most desirable that the opportunity of examining a specimen of this class of habitation in the very centre of the city should not be passed over without receiving the attention it deserves."

The occurrence of the pottery with the more primitive remains makes the elucidation of this remarkable deposit somewhat difficult; and in the discussion which ensued, further information was hoped for. It was suggested that these remains might be vestiges of the ancient British inhabiting

the marshy districts round London, who were undisturbed by their conquerors.

A paper by the Rev. CANON TROLLOPE, "On the Maladery, or House of Lepers, near Lincoln," with a notice of a remarkable sepulchral slab found on the site, was then read (printed in the preceding volume of the Journal, p. 212). Mr. E. Smirke, who had lately brought the subject of lepers before the Institute, mentioned that some documents had lately been printed referring to an establishment in Cornwall, St. Lawrence Ponteboy, near Bodmin, similar to that at Lincoln, by which it appeared that the Court of Chancery had settled the revenues of that house upon the general hospital of the county, directing a preference to be given to lepers, and that an eminent living physician had signified his intention to turn the privilege to account, thereby raising an important legal question which was now under consideration. The chairman remarked upon the different treatment the poor sufferers now received, and said that the disease was stated to be more general than usually supposed.

Antiquities and Works of Art Exhibited.

By the Rev. GREVILLE J. CHESTER.—A picture-map of Palestine, in which the Holy City, with its domed buildings, is conspicuous. The chief cities are shown in a sort of bird's-eye view of the Holy Land, the names being inscribed in Hebrew, and also in what seems to be the *lingua Franca*, or mixed Italian commonly used by the Israelites in Eastern lands. The relative position of these cities, the Mediterranean, the Jordan, the Dead Sea, and Sea of Tiberias, seems wholly imaginary, and not set forth with any geographical knowledge. Towards the top of the sheet, on the right, are seen the cities of the plain, and a curious object like a staircase, above which is written, *moglia di Lot*, or Lot's wife. The intention of this singular representation may deserve investigation. Recent travellers state that, according to local tradition, the position of the "Pillar of Salt" is associated with a spot near the Dead Sea, where an abrupt acclivity occurs formed with strata of salt, and to these strata possibly the steps may refer. Near the lower left hand corner is seen Jaffa and the coasts of the Mediterranean. The flags that fly from turrets in the seaport town are possibly indications of the representatives of various nations established at Jaffa, for the convenience of persons arriving from Europe at that seaport. This picture-map is executed by hand on a large sheet of paper, and coarsely colored. It is of interest as an example of the familiar ichnography of the land of their ancient inheritance; in which map probably the general features of some map of greater antiquity may be discerned. Such maps are common among the Israelities. Somewhat similar maps are woven in cotton tablecloths by the Jews at Leghorn. Mr. Chester saw one in the house of Nathan, chief rabbi at Alexandria.

A large woodcut of rude execution, supposed to be Italian work, the conspicuous feature being the typical representation of the Holy City. This, however, cannot be designated as a map. The Hebrew inscriptions in compartments all around seem to give the names of patriarchs or other persons of Old Testament history.

A marriage settlement on a coarsely emblazoned sheet of parchment. It has been defaced by the knife, cancelled perhaps intentionally; the contracting parties may have changed their purpose.

Several Hebrew charms, blessings and curses, written on leaves of parchment and rudely emblazoned, were sent also. Mr. Chester obtained them amongst the Israelites in Africa. Of these some are charms against scorpions and other noxious vermin, rudely figured on the parchment; to others are attributed virtues for securing numerous offspring, especially of the male sex. The names of the ancient patriarchs and of their wives are introduced on the margins,—Adam, Eve, and so forth, with other Hebrew inscriptions that have not been explained. On these Hebrew charms appear various ornaments, doubtless of symbolical import:—the interlaced triangles (Solomon's seal), the hand of Providence,—a prevalent Oriental symbol of mystic virtue. Small representations of keys are repeatedly found; the "key of David" perhaps, and here introduced as an emblem of power. Although these mysterious scrolls do not appear to be of any great antiquity, it is probable that they are reproductions of *formulæ* of an earlier period.

These objects had lately been acquired by Mr. Chester at Tripoli in Barbary.

By Mr. J. E. Lee.—Drawings of two ancient cannon in the Museum of the Society of Antiquaries, Edinburgh. Mr. Hewitt remarked that the oldest of these cannon, as he understood the drawing, is of the type characteristic of the fifteenth century, consisting of a core of longitudinal staves, around which hoops of iron have been shrunk, leaving a space for the insertion of chambers. A spike in lieu of cascable has had a wooden handle fixed over it, to direct the fire. The four guns in the other, arranged in the manner of an "orgue," are of Swedish construction for light pieces in the time of Gustavus Adolphus, having a core of metal overlapped with cord and leather. Turner, in his "Pallas Armata," written in 1670, mentions similar guns:—"Pieces of ordnance that shoot in a direct line are either of leather, of iron, or of copper. Those guns which are called leather-cannon have copper under the leather, and are made with great art, and are light to carry, which is the greatest advantage they have. Iron guns are accounted better than the leather ones, but experience hath taught us that they are not so good for many purposes as those of copper" (chap. vii. p. 189). A similar gun is in the Woolwich Museum (Rotunda), the core in that example being of copper. The device of forming several or many guns into a group for defence of a breach, bridge-head, or other straight passage, has appeared throughout the whole period of fire-arms, but has never found favour among practical men. Examples of the Orgue in various modifications will also be found in the Royal Artillery Museum at Woolwich.

By Mr. W. Bernhard Smith.—A remarkable Indian "puttah" or gauntlet sword. The long and fine "Solingen" blade has a hilt of steel plated with silver, in the form of an elephant's head armed for battle.

Fragments of a privy coat of defence or mail, probably Venetian, *circa* A.D. 1500. It is formed by a series of small oblong plates of tempered steel, arranged in rows, and overlapping each other. Each plate is secured to the fabric of the coat, canvas and purple velvet, by rivets of hard yellow metal, the heads of which present the appearance of gilt studs or spangles on the velvet. The intervals between the rows of plate are filled up by strips of fine chain mail, sewn on to the canvas. The rings are clenched, not riveted. Such coats are often depicted in the portraits of the time.

A woodman's axe, with bullet marks, one of which had perforated the iron.

A finely-worked rosary in silver, probably of the sixteenth century, with a pendent Latin cross, on which was a puzzling inscription. The workmanship was probably Russian.

By Mr. J. HENDERSON.—Another example of the Indian "puttah" or gauntlet sword, with a fine Italian blade, and the hilt in the form of a tiger's head, beautifully worked. This fine weapon had an interesting story attached to it, as having been carried by an Indian sepoy, Raggoneth Sookul, when protecting Captain Gordon of the 6th Native Infantry in the late mutiny at Allahabad, and by whom that officer's life was saved.

By Mr. J. YATES, F.S.A.—A copy of the photograph of a remarkable Greek inscription on a marble arch belonging to the ruins of Saloniki, the ancient Thessalonica. The photograph has been obtained through the exertions of the Rev. D. Morton, of Harleston Rectory, near Northampton. Mr. Vaux has exhibited it to the Royal Society of Literature, with a learned commentary, showing that, although several antiquaries had bestowed their care upon it, photography now first produces its real features. The extraordinary reading πολιταρχας in Acts xvii. 6, 8, is fully justified by πολιταρχουντων, the first word in this inscription, where πολιαρχουντων without τ might have been expected. No authority is found in any classical author for the insertion of τ, which gives a somewhat different sense, but its correctness is at length clearly shown by the Saloniki inscription. Mr. Yates mentioned that copies of the photograph are sold by Mr. Dorman, bookseller, Northampton.

By the Rev. J. FULLER RUSSELL, F.S.A.—A small picture, apparently a fragment of a *gradino*, and containing, within circles, half figures of SS. Augustine and Nicholas of Tolentino. It is ascribed by Dr. Waagen to Lº Spagna (Treasures of Art in Great Britain, vol. ii. p. 463).—A photograph of a very beautiful triptych in the possession of M. Wolsey Moreau, of 71, Rue Neuve S. Augustin, Paris. Its possessor attributes it to Memling, and believes it to have been the portable altar-picture of Philip the Good, Duke of Burgundy. The central compartment contains a representation of our Lord on the cross, between SS. Mary and John, with a fortified city, rocks, and water in the distance; and in the foreground, a knight, in plate and chain armour, kneeling in prayer opposite a lady who is also praying, behind whom is a youth upon one knee, and with his right hand resting upon his breast. Behind the knight is a shield charged with a lion rampant, and surmounted by a helmet of eight bars, which has for its crest a circlet formed of rings, from which arises the demi-figure of a demon with large bat-like wings and uplifted claws. Just above the demon are the head of an aged man and a ring. On the wing to the right of the spectator are S. John Baptist standing amid rocks and trees, and below S. Barbara holding her tower in both hands, and S. Catherine with her wheel and sword. On the left wing is portrayed the Nativity, and beneath S. Francis lifting up both hands and displaying the *stigmata*, and a personage vested in a mantle and rich tunic, with a falcon on his left fist. The wings are painted on the exterior in chiaroscuro, and represent, within circular-headed niches, on the right, S. George in plate armour on horseback, about to pierce with his spear the dragon which writhes beneath his horse's right hoof; on the left, S. Jerome removing a thorn from a lion's foot. In a shed behind the saint, which is fixed in a rocky recess, and roofed by a sheaf of corn, is an altar with a crucifix. Mr. Russell stated that the pho-

tograph had been kindly given him (when in Paris a short time since) by M. Moreau, who asked £2000 for the triptych; and he also invited attention to a photograph of the devotional folding-tablet by Memling (described in this Journal, vol. xvi. p. 206, and vol. xxii. p. 382) in his possession, which he had brought for the purpose of comparison. Mr. Russell has subsequently informed us, that in a letter which he has received from Mr. Weale, of Bruges, that gentleman remarks,—"I am well acquainted with M. Wolsey Moreau's picture, and tried hard to persuade Sir Charles Eastlake to purchase it. It most certainly is not a Memling; and although I have no documentary evidence in support of my statement, I have not the least doubt that this work is an authentic picture of Hugo van der Goes, the master who approaches most nearly to our great Hans. . . . . As regards differences between his manner and Memling's I would draw your attention to Hugo's peculiar way of drawing nude feet. He also uses his brush more freely than Memling, whose colour is always very thin. Hugo also was in the habit of adding details to his picture when finished. M. Wolsey Moreau's picture could not have been painted for Philip the Good."

December 7, 1866.

Mr. Octavius Morgan, F.S.A., M.P., and V.P., in the Chair.

The Rev. W. Lowe, Vicar of Bunbury, Cheshire, communicated an account of the church there, now in course of repair, and of many interesting objects found in the progress of the works. The church, which is dedicated to St. Boniface, consists of a nave with north and south aisles of eight bays and a chancel of four bays, with the Ridley Chapel (built by Sir Ralph Egerton in 1527) on the south side. The tower occupies two bays at the west end, forming an area of about 28 ft. square, standing on massive moulded piers and arches of the decorated period. The nave is of the perpendicular period, having been rebuilt at a date subsequent to the tower, the base of a pillar of the decorated period having been uncovered in the course of the alterations. Some of the windows had good stained glass in them. Under the window on the north side next the altar is a fine recessed and canopied space, in which was a founder's tomb. The chancel contains the tomb of Sir Hugh Calveley, who purchased the advowson of the church from the Bunburys, and procured a charter from Richard II. (A.D. 1387) to found a college of secular canons there. Sir Hugh was very active in the wars of his time, and distinguished himself in the Spanish campaign of the Black Prince. At the great wreck of Sir John Arundel's expedition on the coast of Brittany he was one of the seven who were saved out of 20,000, and his foundation at Bunbury is said to have been owing to a pious resolve on account of his escape. The tomb of Sir Hugh Beeston, an admiral of Queen Elizabeth, is also in the chancel.

Surrounding the chapel of the Calveleys in the north aisle, and of the Spurstows of Spurstow Hall (a moated mansion now belonging to Lord Crewe), in the south aisle, were elaborately executed and painted screens formed of oak. A large number of the panels, tracery, and other parts of these screens were exhibited by Mr. Lowe. The paintings were remarkable for the force and brightness of the colours used, but the execution is somewhat coarse, and was most probably provincial workmanship. Some

of the inscriptions were not legible, and some of the figures depicted were doubtful. Remains of painting in distemper had been found on the walls, probably a St. Christopher; and an altar-piece, apparently representing the resurrection of our Saviour, with attendant saints, etc., painted on a red background, powdered with white stars, and edged with black. Two finely-incised coffin slabs (probably of the fourteenth century) had also been found, of which photographs were exhibited. Some encaustic tiles with heraldic and other patterns, and a piece of sackcloth found in a stone coffin 2 ft. below the floor of the nave, were also shown.

Mr. James Yates, F.S.A., read the following remarks upon a "Hebrew Charm," in connection with a crucifix belonging to the Priory of Gisborne, Yorkshire. "In the course of my summer's residence at Whitby, more than twenty years since, Mr. Ripley, surgeon, of that town, showed me an ancient wooden crucifix, which had formerly belonged to the Priory of Gisborne, in the north of Yorkshire. It was about a yard long. It was supposed to have been especially intended to be carried to the chambers of those who were dying, or afflicted with serious illness. In the stem of the crucifix was found a concealed cavity, in which was a slip of parchment with the word אגלא (agla), in Hebrew letters, several times written upon it. The question of course arose, what was the meaning of this word? and the questioners naturally thought of Aglaia, one of the Graces. Not being satisfied with this solution of the difficulty, they conjectured that the crucifix might have been used in exorcism. This led me to search for books on exorcism; and in the British Museum I alighted on an old book, printed I think in the Venetian territory, which contained an enumeration and explanation of such terms. One of these was the Hebrew word אגלא, explained as composed of the initial letters in the following sentence:— אתה גבור לעולם אדני (ate gebur loulem adonai), that is, 'Thou art great for ever, O Lord.' This new word was formed by the following process. The Jews were accustomed in the Middle Ages to abbreviate sentences or phrases; thus Maimonides was Rabbi Moses Ben Maimon, but they called him Rambam; Nachmanides was Rabbi Moses Ben Nachman, but they called him Ramban. In like manner the short sentence, Ate gebur loulem adonai, was contracted into one word AGLA, and this short word was supposed to operate as a charm in subduing disease, or expelling evil spirits."

Mr. George Scharf, F.S.A., then gave an account of the proceedings lately taken for the restoration of the portrait of King Richard II., belonging to the Dean and Chapter of Westminster, and illustrated his remarks by tracings of the principal portions of the picture taken by him before any change was attempted to be made in it, and of the face of the king since the operations had been completed. Mr. Scharf said that it was a matter of great regret that better and fuller notes of the earlier state of the picture had not been taken, as the changes in it were so considerable and remarkable; but no one had anticipated their extent or importance. It had been photographed at South Kensington, but with a very unsatisfactory result; and that photograph, with Mr. Scharf's tracings, were now the only evidences of the once well-known picture. After detailing what was known of the history of the picture, and describing its characteristic features, Mr. Scharf spoke of the doubts which judges of art had long entertained as to many parts of the work, and how those doubts had been impressed upon the custodians of the picture till they were induced to permit experiments

to be tried upon it. Those experiments were entirely successful. Thus encouraged, the work was continued, and the result was (as Mr. Scharf fully believed) the genuine and entire re-production of the first Royal portrait in the country, exactly as it was executed by the artist of the fourteenth century.

Instead of a large, coarse, heavy-toned figure, with very dark, solid shadows, strongly-marked eyebrows, and a confident expression (almost amounting to a stare) about the dark-brown sparkling eyes, we now have a delicate, pale picture; carefully modelled forms, with a placid and almost sad expression of countenance; grey eyes, partially lost under heavy lids; pale yellow eyebrows, and golden-brown hair. These latter points fully agree with the king's profile in the well-known little tempera diptych at Wilton, belonging to the Earl of Pembroke. The long thin nose accords with the bronze effigy of the king in Westminster Abbey; whilst the mouth, hitherto smiling and ruddy, has become delicate, but weak, and drooping in a curve, as if drawn down by sorrowful anticipations even in the midst of pageantry. Upon the face there is a preponderance of shadow, composed of soft brown tones, such as are observable in early Italian paintings of the Umbrian and Sienese schools executed at a corresponding period. Indeed, the general appearance of the picture now forcibly recalls the productions of Simone Memmi, Taddeo Bartoli, Gritto da Fabriano, and Spinello Aretino; but more especially those of their works which have suffered under a similar infliction of coatings of white-wash or plasterings of modern paint.

Many alterations seem to have been made by the restorer in various parts of this figure of King Richard, and well devised folds of drapery quite destroyed through ignorance. The position of the little finger of his left hand, holding the sceptre, was found to have been materially altered. The letters R, surmounted by a crown, strewn over his blue robe, were changed in shape, and the dark spots on his broad ermine cape were distorted from their primitively simple tapering forms into strange twisted masses of heavy black paint. The globe held in his right hand, and covered with some very inappropriate acanthus leaves, was at once found to be false, and beneath it was laid bare a slightly convex disc of plain gold, very highly burnished. This, however, was not an original part of the picture. A plain flat globe with its delicate gilding was found still lower; and it was then ascertained that the head of the sceptre and the crown on his head had in like manner been loaded with gold and polished. Beneath these masses of solid burnished gilding, bearing false forms and ornaments unknown to the fourteenth century, was found the original Gothic work, traced with a free brush in beautiful foliage upon the genuine gold surface lying upon the gesso preparation spread over the panel itself, and constituting a perfectly different crown as well as heading to the sceptre from those hitherto seen. The singular device of a fir cone on the summit of the sceptre has disappeared entirely. The diaper, composed of a raised pattern, decorating the back-ground, coated over with a coarse brown powder, and not even gilded, was found to be a false addition. It was moulded in composition or cement, possibly as early as the reign of the Tudors. Not only did it stand condemned in itself by clumsiness of workmanship and a reckless fitting together of the component parts, but it was found to have extensively overlaid some of the most beautiful foliage and pieces of ornamentation. The picture is painted on oak, composed of

six planks joined vertically, but so admirably bound together as to appear one solid mass. The back is quite plain.

The large, clumsy frame was found to have concealed a considerable portion of the picture; and by removing it the carved end of the chair, on one side, and the lower part of the curved step in front were laid open to view. Unfortunately, the right side of the picture, beneath the frame, had been wantonly mutilated by hacking, as if with an adze or hatchet, which rendered the chair on this side much less perfect. The raised diaper-work was continued under the frame, and, in the upper left-hand corner, had been curiously patched by two square pieces of inferior workmanship, which were let in as if to make good some incidental flaw.

The substantial and sterling qualities of the painting were plainly shown by their being obliged to use the strongest chemical solvents to get rid of the superincumbent work; but these had not the slightest effect upon the original painting. Mr. Scharf passed a high eulogium upon Mr. Richmond, R.A., and Mr. Merritt, for their execution of the task committed to them, and concluded by expressing a hope that the picture would be returned to its original position in the Abbey.

The Dean of Westminster thanked Mr. Scharf for his able description, both of the picture and of the operations upon it. It was replaced in the Jerusalem Chamber till the Abbey should recover from the confusion it was then in, owing to the introduction of warming apparatus, and the rebuilding of the reredos. It had been originally placed over the pew of the Lord Keeper, on the south side of the choir, and the lower part of the picture had been injured by the heads of those in the pew rubbing against it. The position was shown by the anecdote of the Lord Keeper Williams having struck upon the pulpit while Peter Heylyn was preaching against him, and exclaimed "Enough, enough, Peter." When the suggestion was first made about the restoration of the picture to its original condition, he had been supported by the opinion of his brother Dean of St. Paul's as to the propriety of assenting to such proceedings, and he was much gratified at the result.

In the discussion which followed, especially upon the precise date of the painting, Mr. Riley remarked that, as the King committed sacrilege by an act of violence at the Queen's burial, the picture might have been given by way of peace-offering. No documentary evidence referring to the picture had, it was stated, yet been discovered.

The Chairman, amid general acclamations, warmly eulogized the moral courage and good taste shown by the Dean and Chapter in this matter, and the skill which had re-produced so fine a work of art; as well as Mr. Scharf for his clear and interesting report of the operations. It was a most gratifying circumstance that the old work had continued unhurt while all the later work had disappeared.

Brig.-General Lefroy, R.A., exhibited a collection of early fire-arms, partly from the Museum of Artillery, Woolwich, partly from the Tower, and including one from the Royal Collection at Windsor. General Lefroy remarked that the immediate cause of his producing these objects before the Institute was the accidental discovery that a barrel bearing the early date 1547, which had been acquired by the Museum of Artillery, is rifled. In these days of rifle competition, such objects had especial interest. On removing the breech plug and cleaning the barrel, the rifling in seven

grooves is clearly perceptible. It had one turn in twenty-two inches, but the grooving was now much worn down; and it had been acquired simply as an early dated fire-arm. It is about forty years earlier than the earliest dated specimen hitherto known in England, namely the one in the Royal Collection at Windsor, now produced; and, so far as he was aware, is earlier than any example elsewhere. The earliest rifle with a date in the collection at Paris is 1589, and at Brussels, 1624. The earliest in the Tower, which was produced, is dated 1610; and the next earliest, at Woolwich, 1592. General Lefroy called attention to the great beauty of the Windsor rifle, which is double-barrelled—one barrel placed vertically below the other,—both rifled in six grooves, calibre 0·5 inch. The butt-plate is richly decorated, and bears the arms of Saxony, with the cypher HF engraved on a shield of ivory let into the stock, which is of cedar or cherry inlaid with ivory. Together with this arm was exhibited a smooth-bored harquebus bearing the same date (1588), from Woolwich, the stock beautifully inlaid with ivory, representing the tragical story of Pyramus and Thisbe; and a smooth-bored breech-loading harquebus, dated 1537, which is said to have belonged to Henry VIII. The remarkable circumstance about this last, was, the resemblance of the breech mechanism in general character to what is called the Snider breech-loader of the present day.

There might be earlier examples than that now shown, at Warwick Castle, for instance; but they were not marked with a date. The Woolwich acquisition had been taken from the Hungarian peasantry in the insurrection of 1849, and by them probably from some château.

Mr. LATHAM exhibited a very late wheel-lock rifle, which was presented by the Emperor Napoleon I. to an English gentleman. He examined the barrel, dated 1547, produced by General Lefroy, and made no question of its being rifled. He said it was by many years the earliest specimen known to him.

Mr. HEWITT remarked that it was a curious fact that the earliest recorded notice of the Rifle, as a military arm, recommended it, not for its distant fire, or more accurate aim, but as being available against the so-called armour of proof. In fact, there was for some time a contention not unlike that of our own day between cannon and armour-plates for ships. The old medieval cuirass was a good defence against the sword or lance of an antagonist; but, fire-arms being adopted, the "attack" became superior. Then the breastplate was strengthened, and the defence regained the advantage. Then the fire-arm was rifled, and again obtained the ascendancy. And the attack being thus rendered superior, body-armour rapidly disappeared. The author first noticing the military rifle was Montecuculi, who, speaking in his Memoirs of various arms and their specialties, signalizes "les arquebuses à rouet pour les sorties, les arquebuses rayées contre les armes à l'épreuve."

Mr. W. BERNHARD SMITH remarked that military rifles were first used by Frederic the Great. They were adopted by the English and French about 1792.

Lieut.-Colonel A. LANE-FOX exhibited and gave an account of the discovery of a human heart enclosed in a leaden case in a church at Cork.

It was found, about four years ago, in the centre of a pillar in the crypt or vaults beneath Christ's Church, Cork.

"The place was in process of being cleared, and one of the workmen putting his hand into a niche in the pillar, discovered the heart. I regret that I am unable to maintain more accurate information as to the exact position in which it was found. The heart was opened by the gentleman from whom I obtained it, and was found to be embalmed in salt. An accurate pencil drawing of the heart, taken at the time, is also exhibited. It has shrunk considerably since. The weight of the several parts was found to be as follows:—

	lb.	oz.
Leaden case	5	12½
Embalming	1	14
Heart	0	7½

"The story supposed to be attached to the relic is, that it belonged to some distinguished individual, and was being carried to the East; that the ship in which it was conveyed put into Cork Harbour a mere wreck, and the heart was deposited in Christ's Church. I attach no value whatever to this story, which, I think it very probable, was invented by the finder to serve some purpose of his own. The difficulty of obtaining authentic information in that part of the world respecting any object of antiquity is very great.

"At the time of finding, I am informed, a very thin coating of silver, much corroded, was found adhering to a part of the case. Referring to Miss Hartshorne's work on Enshrined Hearts, I find that the heart of Richard Cœur de Lion, which was discovered in Rouen Cathedral in 1838, was encased within two boxes of lead; within this was a second interior case, and upon it a thin leaf of silver which time had in a great part decayed. The case, it will be seen, is 'heart-shaped,' and measures 8 in. in length by 6½ in. greatest breadth. It is similar in form to that in which the heart of Robert Bruce was enshrined, which Douglas wore with a chain round the neck, and which has since been retained in the arms of the Douglas family."

Mr. J. Yates, F.S.A., exhibited a remarkable Romano-British urn, found at Geldeston, Norfolk. It was of large size, remarkably thin, not thicker than Greek or Etruscan vases. Mr. Yates remarked, that for the exhibition of the fractured urn from Geldeston the Archæological Institute is indebted to the Rev. Daniel Gillett, rector of the parish. The chancel of the church having been taken down to be re-built the fragments of this vessel were discovered. Mr. Gillett entrusted them to him. He took them to the British Museum, where they were put together by Mr. Ready, and were inspected by Dr. Birch and other antiquaries. It is the opinion of these gentlemen that the vessel is of Roman or Romano-British manufacture. It has evidently been turned on the potter's wheel, and is remarkably thin, not thicker than Greek or Etruscan vases, though of coarser material and a rougher surface. Its form approaches the globular. The rim at the top has a single ornament, which the potter has impressed with his thumb on the moist clay, and which is regarded as indicative of a Roman origin. The dimensions are 11½ in. high, 16 in. diameter.

In the sixth volume of the Archæological Journal, p. 109, Mr. Yates described a Roman interment, which was discovered in 1849 at Geldeston, not far from the same spot. The remains of this sepulchre were in the

plain, a little above the river Waveney. The church is on the rising ground, which forms a ridge to the north of the Waveney.

The remains of the sepulchre and its contents are preserved in the Museum at Norwich; the vessel, lately discovered, has been given by Mr. Gillett to the British Museum.

The question may be asked, What was the use of this vessel? Perhaps it may authorise the conjecture, that the church was built on the site of a heathen temple, as was certainly done in many other cases. If so, the urn may have been used in acts connected with the temple-service. The date of the interment was about A.D. 130, as is shown by the coin of Sabina, found with the bones of the deceased Roman boy.

Mr. Gillett has sent Mr. Yates the following remarks on the name of his village and the site of his church:—

"I am very glad that the few broken pieces of pottery have proved so interesting and valuable. I hope you will present them to the Museum.

"Your description of the old temple-site and of the neighbouring Roman station, has confirmed an opinion of mine, which Mr. Rix of Beccles also formed, that the name of this village arises from the Gelt, which was paid here.

"The Romans had their station on Danburgh Hill, at the foot of which the Roman interment took place. Here, no doubt, the tribute of the neighbourhood was paid; and when the Danes had possession of the country, they took the same commanding station for a fortress, and held it as a convenient place for the collection of their Gelt. Danburgh Hill commands the river at its foot, and the view of the whole neighbouring country.

"The Church Hill, the site of the temple, is another most commanding site; but it is now, and probably always was, hidden by ancient oaks and elms, so as to conceal it from the river and make it a solemn and silent, and awe-inspiring place."

Dr. Rock suggested that possibly the urn was not funereal, but had been worked into the wall to propagate sound.

Antiquities and Works of Art Exhibited.

By the CHAIRMAN.—Chalice and paten, belonging to the parish of Nettlecombe, Somerset; by favour of the Rev. H. W. Jermyn, rector. The chalice is of silver gilt, 6 in. high. The bowl and hexagonal foot 4 in. diameter; the stem is hexagonal, and the knob is ornamented with six projecting quadrangular bosses, terminating in lions' masks, the intermediate portion being occupied by pierced Gothic work. On one side of the foot a panel has been cut out, and a silver-plate, deeply incised, with a

representation of the Crucifixion, surrounded with foliage, has been clumsily riveted in. This plate has once been filled in with enamel, of which traces are still to be seen. When this was done is not known. It is probably the original plate, though it is not likely that the original silver-worker would have left it in so clumsy a state as that in which it now is.

The paten is 5⅛ in. diameter; it is in the form of a plate, having a brim round a sunken six-foil centre, the spandrils of which are engraved with a radiating pattern. In the centre is a circular depression, in which is a representation of the face of our Lord, in translucid enamel, on an engraved ground. Round the head is a cruciform nimbus. At the back of the enamel is let in a circular plate of silver gilt, engraved with the sacred monogram I. H. S. in fifteenth century Gothic characters. On both chalice and paten are the Hall marks beautifully clear; these are the leopard's head crowned, being the standard mark, a dimidiated fleur de lis, the maker's mark, and the annual letter or Lombardic B, cusped outwards, which seems to supply the missing alphabet, and would indicate the date 1459, and this would thus be the second earliest piece of English plate known.

By Brigadier-Gen. LEFROY, R.A.—Examples of early rifles and firearms. Curious breech-loading smooth-bored matchlock harquebus, dated 1537, from the Tower, class 12, No. 1. It is thus described in the catalogue:—Harquebus loading at the breech, with moveable chamber. This arm appears to have belonged to King Henry VIII. It is named, with others, in the Tower Inventory of 1679:—"Carbine, 1; Pistol, 1; and Fowling Piece, 1; said to be King Henry VIII." The barrel is chased and gilt. Among the ornaments are the King's initials "H. R," and a rose crowned, supported by two lions. The date, 1537, is engraved on the breech. The armourer's mark is a fleur de lis, surmounted by the letters, W. H. Length of barrel, 1 ft. 11 in. This arm is figured in the Archæologia, vol. xxxi., p. 492.

Curious breech-loading smooth-bored matchlock harquebus, not later than 1547, from the Tower, class 12, No. 3. It is thus described in the catalogue:—Harquebus, with fluted barrel, of same period as the preceding. Among the carvings of the stock are the rose and fleur de lis. It is a breech-loading arm, and it is remarkable that the moveable chamber which carries the cartridge has exactly the form of that in vogue at the present day: length of barrel, 6 ft. 6 in. This is probably the arm attributed to King Henry VIII. under No. 1,—the "fowling-piece" of the monarch. Both of these arms are remarkable for the resemblance of the breech mechanism in principle, to what has been very lately introduced under the name of the "Snider" system, the moveable iron charge chamber being represented in the modern example by a metallic cartridge.

Barrel, dated 1547, rifled; calibre 0·66. It has been altered for a percussion lock by the Hungarian insurgents, from whom it was taken in 1849. From the Museum of Artillery, Woolwich; class 7, No. 2. The rifling has been in seven grooves, with about one turn in 22 in.; but either from the effect of corrosion and cleaning, or of grinding out to take a slightly longer bullet, the grooves are hardly distinguishable on one side, but they are quite distinct on the other.

Fine sporting wheel-lock rifle, beautifully mounted, with inlaid stock, dated 1588. This beautiful piece is double barrelled; the barrels are 32·5 in. long, and placed in the same vertical plane; the calibre is less than 0·50; and the spiral is about ¾ turn in length. The wheel and touch-hole of the

lower barrel are advanced 1·5, and the tube is by so much shorter. It is rifled in six grooves. The piece is marked with the date 1588, and beautifully mounted on a stock of cedar or cherry-wood inlaid with ivory; the cypher HF occurs in the ornamentation, and the butt-plate, which is of steel, handsomely engraved in relief, bears a shield with the electoral insignia of Saxony (?) on the right (two swords crossed), and the arms of Saxony on the left. It is provided with a double wheel-lock, with the springs outside, an important feature in early rifles, and two cocks, both working on the same spring, which is split, to enable them to act independently. The cocks are richly chased; one of the wheels is set in an open work gilt mounting, the other is not mounted. The heads of the principal screws are brass, cut to represent lions' heads. The armourer's mark on the lock-plate is a bear or monkey, sitting; the upper surface of the barrel has a fluted channel leading to the back sight, a peculiarity not unusual in early arms; the stock is remarkably short. It is the property of Her Majesty, by whose gracious permission it is exhibited.

Fine sporting wheel-lock gun, smooth-bored, dated 1588. The stock is beautifully inlaid, with the story of Pyramus and Thisbe. From the Museum of Artillery, Woolwich, class 5, No. 11.

Rifle, dated 1592. This piece has been re-stocked and altered to percussion by the Hungarian insurgents, from whom it was taken in 1849. From the Museum of Artillery, Woolwich, class 7, No. 1.

Fine sporting wheel-lock rifle, beautifully mounted, with inlaid stock, dated 1613. From the Tower, class 12, No. 40. It is thus described in the catalogue :—"Hunter's rifle, dated 1613; the stock richly ornamented with ivory and chased brass. Brass furniture for fire-arms comes generally into use at this period. Figures of the stag, the chamois, and the eagle are among the decorations. The barrel has a seven-grooved rifle, with double lines between the grooving." From the Royal Military Repository, now at the Museum of Artillery, Woolwich.

A German sporting rifle, dated 1623, by Augustinus Kotter. From the Museum of Artillery, Woolwich, class 7, No. 1.

A German rifle of the eighteenth century, straight grooved.

By Mr. J. Henderson.—A beautiful selection of Oriental arms, consisting of a Persian dagger of the Cama type. The straight, two-edged blade is chased and gilded, with two grooves inlaid or veneered with watered steel. The hilt is of ivory, and the scabbard mounted with silver, enriched with niello and a band of small turquoises.—Curved Indian dagger of watered steel. The blade delicately ornamented with arabesque ornaments chased out of the solid metal; the hilt of steel.—Another, of the same type, ornamented with engraving. Both edges of the blade are "ingrailed," *i. e.*, cut into sharp teeth formed by a series of semicircular notches.—Curved Asiatic dagger, of finely watered steel; hilt of ivory; sheath covered with green skin and silver mounted.—Straight, single-edged knife, from India, in white skin sheath, which contains a smaller one. The blade very finely watered, and the mountings of the ivory handle of steel, ornamented with flowers and birds of embossed and chased gold.—Straight, single-edged Indian dagger, with watered blade, having a solid point; hilt of ivory, and sheath of green velvet, with chape and mouthpiece of chased silver.—Kuttar, in sheath of gilt and stamped leather, with chape of steel embossed with gold. The blade, with solid point, is chased, and veneered in the centre with watered steel; the hilt enriched with gold.—Another, more ancient, also with solid point; an elephant and tiger chased out of

the blade; guard ornamented with silver.—Another; the blade chased with the figures of a horseman on one side, and an elephant and his rider on the other.—A kriss; the handle of singular form, and the blade elaborately chased throughout with serpents amongst flowers and foliage.

By Mr. W. Bernhard Smith.—A collection of fine Oriental daggers, "kuttars," krisses, &c., all of remarkable workmanship, and many of them of early date. Etui, of perforated brass, in form of a knife-sheath, containing two instruments of doubtful use; a knife in a sheath of steel, chased with figure of Judith (?) and foliage, *temp.* Henry VIII.

By Mr. J. Yates, F.R.S.—A coloured engraving of the mosaic found at Thurston, Hants, in 1823, which probably belonged to a small temple of Bacchus.

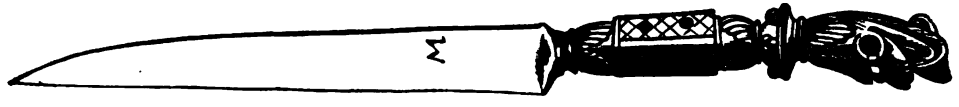
By Mr. E. Richardson.—Nine tiles from an old farm-house at Kidwelly, South Wales.—A fossil piece of buck's horn dug up with a large silver coin of Constantine in making the Thames embankment at Whitehall.—A flint arrow-head, found on the extreme west coast of North Canada, by Captain M'Clean, in the year 1838.

By Mr. W. Burges.—Portions of a triptych, which had been attributed to Mabuse. It consisted of the two outer leaves, which had been joined together. The painting had evidently been re-touched.

By Mr. J. Nightingale.—A portrait of Chaucer; a sixteenth century copy of the well-known miniature.

By the Rev. H. Aston Walker.—A Japanese bowl; date about B.C. 200.

By the Rev. J. Bathurst Deane, F.S.A.—A lady's fruit-knife, of the seventeenth century, found in Kingston House, Bradford-on-Avon, Wilts, with a richly decorated handle.



A large carriage watch, of Viennese work, date about 1712-1715; the case of silver, chased and pierced. It is a repeater, made to act by pushing in a pin on the pendant or handle. It winds up in three places, and probably had a going, striking, and quarter parts.

By Miss Estridge.—Enamelled locket, dated 1737. Russian work, the subject probably allusive to some political incident.

February 1, 1867.

Mr. C. Sprengel Greaves, Q.C., in the Chair.

Mr. E. Smirke gave an account of the legend of the hunting of King Edmund at Cheddar, as described in a MS. among the muniments of Axbridge, Somerset. The MS. is probably of the fourteenth century, and one of the objects of its dissertations is the supposed origin of English boroughs, and that of Axbridge in particular, together with a description of the state of that town. Dunstan was famous in those parts, the neighbourhood abounding in stories relating to him. One of the most remarkable is that of his having saved King Edmund, when hunting in the Mendip Hills, from being carried over the Cheddar cliffs by his horse. This intervention led to the King's reconciliation with the great reformer, or improver, of the times; and the story as told in the MS. was a remarkable corro-

boration of oral tradition by documentary evidence. That there was for many centuries an intimate relation between the manor of Cheddar and the town of Axbridge, and that the title to both was long identical, is certain. The story of the royal hunt on Mendip has been often referred to, and had been lately brought forward by a writer who had compared the narrative still current on the spot with the earliest known biographical memoir of St. Dunstan found in the British Museum. He was not perhaps aware of the existence of the documentary evidence of the story in the keeping of the mayor and burgesses of Axbridge, from which the peasantry might refresh their memories through the medium of their more intelligent neighbours. Mr. Smirke's notice of the MS. is given in this Journal, vol. xxiii., p. 224.

The CHAIRMAN spoke of tradition as deserving much weight, but there was a difficulty sometimes in estimating it. He adduced several instances of its importance; the race of the country people having scarcely changed, so that stories were handed down from mouth to mouth.

Dr. ROCK also mentioned some curious instances of tradition. In the neighbourhood of Bunbury, Cheshire, there was a tradition of a battle having been fought, of which he knew no account in history. As to St. Dunstan, the "Acta Sanctorum" contain the germs of English history. Wharton's "Anglia Sacra" lost much of its value from omission of the miracles, which contain so much matter illustrative of the habits and customs of our ancestors.

The Rev. JAMES BECK gave a notice of a late discovery of silver coins in Sussex. Early in the last month it was announced in the local papers that a large discovery of silver coins had occurred in Sussex, in ploughing up a headland on Chancton Farm, situated between Washington and Ashington, on the northern flank of the Downs to the west of Steyning. The ploughman noticed that his plough had struck against something that caused it to be thrown out of its course; on examination it was found that he had disturbed an old crock or earthenware pot, and as it had been broken by the plough the contents were brought to light, consisting of a large quantity of silver coins, described as chiefly of the reigns of Harold and the Confessor. They were all packed in the crock, it is said, on their edges, as closely as possible, and had evidently remained undisturbed since the deposit of the hoard; the crock moreover, it is believed, was in perfect condition until damaged by the plough, and it is to be regretted that such a specimen of early pottery, probably of the eleventh century, had not been preserved. He was at the spot a few days after the coins were found, and secured a great number which would have found their way into the melting pot, owing to the indiscretion of the police.

The farm on which the find took place belongs to the Duke of Norfolk, and is tenanted by Mr. Charles Botting. An old barn was pulled down a couple of years ago, and the hedgerow which formed one of the fences of the barnyard contained some old trees which were cut down, leaving the stumps. Last year the site was dug up for potatoes, and a few coins, Mr. Beck was told, were found, but no notice was taken of the circumstance. This year the land was ploughed up, and the hedgerow and stumps removed, the plough in passing over the site of one of the stumps sunk into a hole, struck against the vase, and brought up a number of the coins it contained. A scramble took place. The farmer obtained about 1400, and the police got about 200 more from the laborers. He obtained more

than 200, which he sent to Mr. Vaux at the British Museum, and about 300 were sold at Shoreham; several others were dispersed in the neighbourhood. There must have been more than 2000 coins, and, as far as he could judge, they were almost all of Edward the Confessor. Some may be of earlier date. The coins had evidently been deposited in a leather bag, and placed in a crock of common earthenware. It was not improbably a hoard secreted at the time of the Norman invasion. Mr. Beck went to the Solicitor to the Treasury, Mr. Greenwood, and had an interview with him on the subject of the discovery. He had no doubt that the greater part of the coins would be sent to the British Museum for examination.

It may deserve notice as a singular coincidence that the site where the late find of so large a hoard of pennies of the eleventh century has occurred, closely adjoins that in which another remarkable discovery was made a few years since, but on that occasion the coins were of a much earlier period. They were late Roman currency of the smallest module; the hoard consisted of several thousand coins that had been deposited in rouleaux in the side of a small dipping-well near a cottage door in the parish of Storrington, situated a short distance to the west of Washington. An account of the discovery, which occurred owing to the little well being cleaned out in a dry summer when the water was unusually low, was given shortly after in this Journal, and in the Sussex Archæological Collections.

Allusion has been made to the indiscreet interference of the police, in the exercise of the duties doubtless incumbent on them, to rescue for the Crown monies or other objects of precious metal thus brought to light. It is obvious that the effect of such authority, however just and right according to law, must be to hasten the transfer of the find to the neighbouring watchmaker or purchaser of valuable commodities, and thus to the melting-pot. Mr. Faussett lately brought before us with great truth the serious difficulties attending the actual state of the question of Treasure Trove. It is scarcely to be anticipated that, in the present case, any effect can be produced towards the recovery of the scattered monies by a summary demand for restitution, accompanied with the threat of pains and penalties. It is highly desirable for the interests of numismatic science that every coin accompanying such a hoard as has been brought to light at Chancton should be submitted to competent examination, since, in such a case, the single piece that irrecoverably goes astray may chance to be the unique and most noteworthy coin of the whole deposit.

In many cases the Treasury had adopted the more conciliatory practice of allowing fair remuneration to the finder on rendering up the treasure appertaining to the Crown. It were surely better to cause notification to be made of such liberal treatment, restitution being made by the finder. What result, on the other hand, can be expected from such a peremptory notice as the following, which has appeared in the "Sussex Standard" of January 26th ult., addressed to the editor:—

"*Ancient Coins on Chancton Farm.*—Sir,—I shall be obliged if you will allow me the use of your columns to request that those people who have any of the coins recently found on my farm at Chancton will at once hand them over to me. The officials at the Treasury have desired that I will at once collect and hand them over to that department, and in their letter on that subject they write thus:—'As these coins belong of right to the Crown, those who detain them do so dishonestly, and at their peril!'—I am, Sir, your obedient servant, Charles Botting."

What effect can we anticipate from such a *Treasury Order?*

By the annual return relating to Treasure Trove, it appears that the coins found at Chancton, 1797 in number, with some fragments, were claimed on behalf of the Crown: 298 of them were given to the farmer on whose land they were found, to the rector of the parish, and to local museums; the remainder were sold to the British Museum, and the proceeds carried to the "Treasure Trove" account. It is a curious fact that the Exchequer should be benefited by the sale of treasure to the British Museum.

The circumstances here detailed gave rise to an animated discussion among the members of the Institute as to the best means of proceeding in similar cases, in which the Chairman, Mr. E. Smirke, Mr. Maclean, Dr. Rock, Mr. Tregellas, and the Rev. J. Beck took part. References were made to the Hastings and other finds, and to the practice existing in Ireland, Sweden, and other countries. The centralisation of the proceeds of every such find in one place in London was considered by some to be an objectionable arrangement, as affecting local interest in such objects.

Sir GARDNER WILKINSON brought under the attention of the meeting the proposed demolition of the curious five-arched gateway on the west side of the town of Tenby, where the ancient walls are still in good preservation. This gate, unique in character, has always been an object of considerable interest to the numerous visitors resorting to Tenby. At a recent meeting of the corporation the vote of the majority carried a proposal to destroy the gate. This decision was strongly opposed by the Mayor, by Mr. Charles Allen also, an influential member of the municipal body, and by others. Sir Gardner considered the case as worthy of the notice of the Institute, and hoped for an expression of interest in the rescue of this curious relic of military architecture, which might be addressed to the Corporation of Tenby with good hope of success.

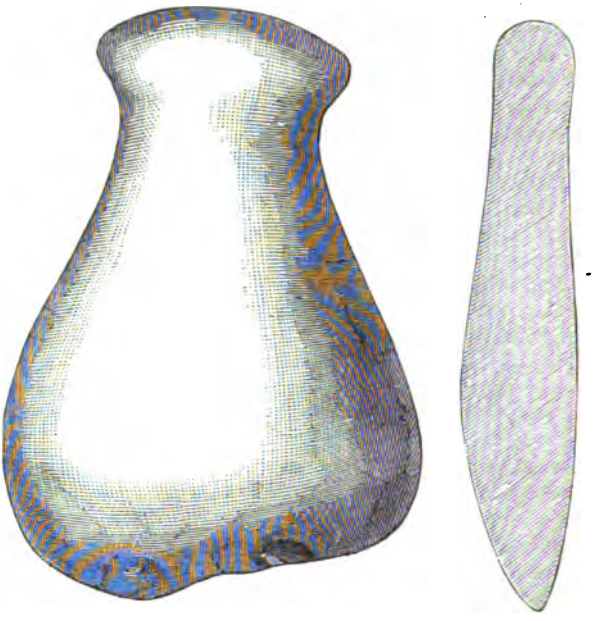
Strong expressions of opinion, coinciding entirely with that of Sir Gardner Wilkinson, were elicited by this communication. A resolution for addressing such a remonstrance, and expressing the strong feeling and regret of the Institute in the matter, was then moved by Mr. E. Smirke, seconded by Dr. Rock, and carried unanimously.

Antiquities and Works of Art Exhibited.

By Mr. J. HENDERSON.—A collection of personal ornaments and oriental arms, comprising an Indian gorget of gold, *repoussé* work; Persian belt clasp of steel, damascened in gold and silver; neck chains, with amulet tubes, worn by the Jewesses of Lebanon; Albanian cartouche boxes of gilt metal, chased in relief; two oriental carved daggers; a "Kuttar" dagger, elaborately ornamented; a "Darjeeling" from the North of India, the sheath of silver filagree studded with turquoises; a Lahore or Sikh knife, in enamelled sheath, with bead embroidery.

By Mr. T. Y. GREET, of Morris Hall, Norham, through Mr. G. TATE, F.R.G.S.—A stone weapon or implement, of very unusual fashion, here figured. It was found in 1858, near Coldstream, Northumberland. Length, 6 in.; greatest width, $4\frac{1}{8}$ in. Stone relics of similar form have occurred, as believed, of Carib origin, and the doubt has been expressed whether this object should be regarded as a relic of early British times.

We have, however, the assurance of the Rev. W. Greenwell, who is so conversant with the antiquities of the northern counties, that a second example has come under his notice. A third is in the Kelso Museum.



Stone weapon or implement found near Coldstream.

Length of the original, 6¼ inches.

Sword found near Norham.

In the Museum of the Bristol Philosophical Society a stone object of similar form is preserved; it is stated that it was brought from Africa. Two examples found in excavations at Alexandria, and now in the British Museum, are noticed in this Journal, vol. viii., p. 421, where one of them is figured. They were in the possession of the late Mr. S. P. Pratt; the example there engraved has longitudinal grooves, and the neck or groove, by which doubtless it was attached to a haft, is fashioned with considerable care. It must be observed that, although in its general form and dimensions closely resembling the remarkable relic found at Coldstream, its workmanship is much more symmetrical.

—Iron sword, found in 1861, projecting from the bank of the Tweed, near Norham Boat House. It is here figured. This weapon measures nearly 33 in. in length; the length of the blade is nearly 28 in. The crescent-shaped cross-guard and piece that takes the place of a pommel are of unusual fashion. The latter occurs occasionally in the sixteenth century; this sword, however, may be assigned with much probability to the thirteenth, or even, as some have supposed, to an earlier period. See

Proceedings, Berwickshire Nat. Club, vol. v. p. 290. A sword of like fashion, found near Elgin, is in the Museum of the Antiquaries of Scotland; it is figured in their Proceedings, vol. v. p. 215, pl. v. The curved guard and pommel are, in that instance, inlaid with silver.—Four leaden rings and perforated disks, found within the ruins of Norham Castle and at Horncliffe, three miles distant from that place. Also a ring formed, as described, of shale; it was found at Norham. Another is of hard sandstone. Two of the leaden disks are here figured. Other examples are given Proc. Berwickshire Club, *ut supra*, pl. xv. A large number have been found at Norham, and melted down.

Perforated leaden disks found at Norham Castle, Northumberland.
Original size.

Several specimens of these singular leaden relics have been brought under the notice of the Institute, and are described in this Journal, vol. xvii. pp. 164, 267, vol. xix. p. 189. The conjectural explanations of the purpose for which they may have been intended are there stated. Mr. Waterton exhibited in 1860 a specimen found near Rome, and it is remarkable that leaden objects, similar in fashion and dimensions, have been found at Athens, and other ancient sites in Greece. There may be noticed, moreover, considerable resemblance between these leaden disks and certain rings of the same metal found in France, that have been described as "Ancient Gaulish Money." Arch. Cambr., vol. viii., Third Series, p. 223. There is doubtless no probability that the relics exhibited, or any other specimens to which reference has been made, may be assigned to such remote antiquity; but it may not be irrelevant to the investigation of their use to invite attention to the occurrence of relics in other countries presenting general features of resemblance to those found in England.

By Mr. George Tate, F.R.G.S., of Alnwick.—A large stone celt, found in a field at Elishaw Bridge, in Redesdale, Northumberland, near the Watling Street. It measures, in length, $10\frac{3}{4}$ in.; diameter of the widest part, $3\frac{1}{4}$ in.—Three stone celts, one of them, length $5\frac{5}{8}$ in., found in a field at Little Houghton, near Alnwick; another, length about $3\frac{1}{4}$ in., found at Boulmer, in the same part of Northumberland; it has the cutting edge carefully sharpened; the third, length nearly 4 in., was found at Bolton.—Three balls of stone, found with a quern formed of porphyry in a British Camp at Weetwood, Northumberland. These objects are perfectly spherical; their diameter varies from $2\frac{1}{4}$ in. to $1\frac{3}{4}$ in. Other examples have occurred in the neighbourhood of Alnwick, and in other parts of Northumberland, but these for the most part are not spherical, the two sides being rubbed down flat, or with a slight cavity on the surface, so that these relics may be familiarly described as in their form resembling an apple. They may have been used in crushing or grinding grain. Compare the "Tilhuggersteen"

of the Northern antiquaries, Worsaae, Afbildninger, fig. 10, and the spherical stones found in abundance in the Lake dwellings of Switzerland, described in Mr. Lee's translation of Dr. Keller's Memoirs.

By Mr. JAMES HORSLEY, of Alnwick, through Mr. TATE.—Four relics found near the foundations of the piers of Alnwick Abbey Bridge, when it was demolished about 1820.—Two silver ring-brooches, one of them inscribed—IESVS NAZAR.; the other—IHESVS NA.; date, fourteenth century. —Brooches and other personal ornaments inscribed with the title of our Lord as placed upon the cross by Pilate, or with some portion of that inscription, are not of uncommon occurrence. A good example, of silver, found in Dumfriesshire, is in the Museum of the Antiquaries of Scotland; it is figured in their Proceedings, vol. v. p. 216, pl. v. A certain phylacteric virtue was probably ascribed to this and other inscriptions of sacred character, such, for instance, as the Angelic Salutation.—A brass seal, the device being three escallops, with the legend—+ IE SV SELE DE AMVR LELE—I am the seal of leal, or true love.—Another brass seal; the device is a demi-figure, probably of a monk; the legend—DEVM TIME ET AMA.

By Mr. H. PARNELL.—A collection of flint-flakes found north-east of Boulogne.

By the Rev. R. P. COATES.—Relics of the Roman period found in digging a culvert near Dartford, Kent, during the past year. The most remarkable of these objects was a circular disk of very thin bronze, full of small holes perforated in lines radiating from the centre. It was considered to have been probably the object-scale of a pair of balances.

By the Hon. ROBERT CURZON.—Two fine tilting helmets, one of the fourteenth, and the other of the fifteenth century. The earlier was remarkable as having the "mamelon" chain perfect. This is often to be seen figured on monuments, but it had not yet been known to exist on an actual example. By this chain the wearer could divest himself at pleasure of his weighty head-piece, and carry it in a more convenient manner.

Archaeological Intelligence.

MR. ALBERT HARTSHORNE announces for publication, to subscribers, "The Recumbent Effigies in Northamptonshire," a county singularly rich in relics of monumental sculpture, and also in sepulchral brasses,—the subject of a special work published in 1853 by Mr. Franklin Hudson. A limited selection of the sculptured memorials was figured by Mr. Hyett; many remarkable examples of monumental art from the earliest period existing in the county were left, however, comparatively unknown. Mr. Hartshorne, who appears to have inherited the taste and keen appreciation of mediæval memorials that characterised our lamented friend, his father, proposes to give a series of 96 photographs, from drawings by himself. The work will be published by Messrs. Cundall, 168, New Bond Street.

The student of primeval remains will learn with satisfaction that Mr. CHARLES WARNE, F.S.A., to whom we owe the Map of Ancient Dorset, so serviceable to those who took part in the Dorchester Meeting in 1866, has completed the long-promised "Celtic Tumuli of Dorset," with illustrations of numerous relics of great interest found in his explorations. The work may be obtained from Mr. D. Sydenham, Bookseller, Poole. Crown folio, thirty shillings.

The Archaeological Journal.

JUNE, 1867.

INAUGURAL ADDRESS

Delivered at the Annual Meeting of the Royal Archaeological Institute, held at Kingston-upon-Hull, July 30, 1867.

By the LORD ARCHBISHOP OF YORK, D.D., President of the Meeting.

In acknowledging with grateful thanks the compliment which has been paid to me by this learned and valuable Society, in nominating me its President for the present year, I take the earliest opportunity of disclaiming all intention of instructing, in the subject of Archæology, the learned audience now assembled before me. He who knows nothing of a subject ought not even to venture to speak of it in the presence of those who know much. But I am here to-day, not as your instructor, but as the spokesman of all classes of the inhabitants of this great county, and especially of this ancient seignory of Holderness, to tell the Members of the Archæological Institute that they are heartily welcome amongst us; and that on the one side we are proud that they have thought this sea-beaten corner of the island worthy of a visit, whilst we believe on the other that there is hardly any portion of the Queen's dominions richer in those monuments and remains which archæologists love to study. We may be proud of the two churches in Hull, Holy Trinity and St. Mary's, the former inviting and the latter having received a wise and liberal restoration. Hedon, a town which, even in the time of Edward I., languished in poverty, feeling the nearness of the two rivals, Ravensrod and Hull, "increasing from day to day" (Inquisition, 9th of Edw. I.), which in the time of Edward III. confessed that its commerce depended upon a sewer called the *Sturch*, along which boats used to pass to the borough,

and that the said sewer was dried up, has managed to preserve for us a church worthy of a more flourishing and numerous population; and we cannot wonder that it bears some marks of decay. Unlike Hedon, which contains examples of various styles, the beautiful church at Patrington is of one period, the Decorated, and has the symmetry of one design. Its graceful spire, for which one is thankful in a country where a height of 190 feet is almost mountainous, its noble oak roof, its beautiful proportions, may entitle it to be called, after the county histories, "the glory of Holderness." A writer describing it in 1840 (Mr. Poulson), speaks of its ruinous condition. But it is already partly restored, and the present incumbent has shown such zeal in an arduous undertaking, that the completion of it cannot be matter of doubt. Of the Abbey of Meaux the remains are very small; but archæologists have to thank Mr. Edward Levien for publishing a volume of manuscripts relating to this important house, and among them a chronicle of its government and doings. Farther from us, but within easy reach, and embraced in the scope of the present meeting, the Minster of Beverley, and St. Mary's church in the same place, now worthily restored, the Priory Church at Bridlington, the noble Abbey Church of Selby, the church at Driffield, possessing, we are told by one rash authority, an effigy of Paulinus, first Archbishop of York; Howden, with its chancel and chapter-house in ruins and fast disappearing; Thornton Abbey, and the remains of the Abbot's house, which are to be explained by one who has studied domestic architecture with the greatest success: all these, and many other monuments of the piety and skill of ages long gone, will pass before us, and will be lectured upon by those whose knowledge may be trusted. Let us hope that, with such a programme, the veteran supporters of this society may carry away with them pleasant recollections—even new information—from this meeting. Let us hope that the novices whom they meet here, a body over whom I should have many titles to preside, may retain the instruction that they are certain to receive, and may catch the infection of that fervent zeal for the past which animates this and the sister association.

In reading the transactions of the sister society to which I happen to belong, I am struck with the moderation of the

modern race of archæologists, in fixing the limits of their science, and in the method which they pursue within those limits. Archæology is a science of the remote past; but this general description would include ethnology, the history of languages, and the study of ancient written records, or palæography. Archæology, according to one authority, should be content to separate herself from all these tempting subjects, and to confine herself to the study of works of human skill which indicate the growth and social condition of man. A boundary line so artificial as this, is likely to be transgressed from time to time. The charter, the chronicle, and the will, are often appealed to, although the object of the science is not the written document; but they are studied not so much for the written thought as for the tangible monuments on which they may throw light—not so much for the development of mind they contain as for their account of things produced by cultivated skill. The charter illustrates for us some church, or castle, or abbey; the will, with its inventory of household possessions, admits us to the interior of a dwelling which we can by no other means reproduce, as it was upon the day when the possessor left it never to return. The main business of archæology is with the works of men's hands.

This is a very narrow and artificial boundary. I would rather hold that the business of archæology was the minute study of all the materials of history, and I learn with pleasure that this Institute has a Section devoted to History. But within it the archæologist has learned to prescribe to himself rigid rules of method. You know that every science consists of two parts—the collection of facts, and the grouping of the facts when collected under some idea, or law, or principle, call it which we will. A French writer tells us that in the course of their history sciences pass through three stages—the theological, the metaphysical, and the positive. I prefer to say that sciences are found in three conditions: the first, where facts are scanty and theory too active; the next where facts have been industriously collected but theory has not been applied for their due interpretation; and the last, or perfect condition, where facts have been abundantly supplied and theory has been used with soberness and yet with bold sagacity for their expla-

nation. Now, the greatest peril to science has always lain on the side of the tendency to theorise overmuch. The hypothesis, too swift of foot for the laggard experience, left her behind. Bacon, in the 16th century, usually has the credit of awakening the world of science from a speculative dream to sober experience; but remarks of Leonardo da Vinci and others, show that this had been felt by other minds. Bacon was the spokesman for his generation of an intuition which perhaps no one else could have expressed so well or with so large an effect. Now the temptation that besets all physical sciences perhaps assails archæology with the greatest force and success. Over the ruined building or the exhumed relic, the feelings of wonder, reverence, regret, and curiosity are aroused; who can wonder that the theory, or rather guess, is prompt, or that it is ambitious? Dr. Stukeley wrote to Gale in 1740 that the church at Driffield was very old, and contained an effigy of Paulinus. I probably do him no wrong in saying that the only evidence connecting the basso-relievo which still exists in the church wall with my great predecessor, was that Paulinus was the first and most illustrious archbishop, and that there was no particular reason against giving his name to the ecclesiastic with a crosier whom Stukeley found at Driffield. Stukeley was a wild and speculative inquirer; in such hands archæology had not advanced very much beyond the standard of the monks of Meaux, who record that in the reign of Henry II. the bones of King Arthur and of Wenevere his queen were discovered at Glastonbury, "and were distinguished by most unmistakeable marks; for Arthur's thigh bone exceeded by three fingers the length of the tallest man's thigh bone that had ever been found, when measured down to the knee; moreover, the space between his eyebrows was of the breadth of the palm of a man's hand." One understands the temptation which makes artless monk and credulous doctor hasty to make over to saint and hero the first great and worthy thing that imagination can manage to connect with their names, but guesses of this kind are not archæology, and it makes little difference in our estimate of them whether they happen to be right or wrong; they tend to bring the whole subject into ridicule and disrepute. Many people think to this day of a museum of antiquities as a collection of stones and potsherds, ticketed into dignity by falsehoods

which no man can prove and no man expose, and divide collectors into two classes—those who deceive themselves, and those who would deceive other people.

Modern archæologists, do not, upon the whole, deserve this harsh estimate. In the transactions of both our English Societies there is a remarkable caution and sobriety. To avoid a groundless theory, seems to have become, as it were, part of the moral code of the archæologist. The time for theories, it seems to be admitted, begins when the collection of facts has been large and general, and as exhaustive as the subject seems to admit. Archæology has passed through the same stages as other sciences: once astronomy and chemistry were bare of facts but full of dreams; but she was born late, and her earlier trips and stumbles took place among her grown-up sisters, who made merry with her failures. Yet the ridicule has stimulated her efforts; and no science walks more firmly or more truly along the line of induction. But ever and again the ardent curiosity and impatience for symmetry will lead us into hasty generalisations. The theory of three periods, the Stone Age, the Bronze Age, and the Iron Age, has been carried too far; and in assigning a place to any weapon or other implement, people often forget that long after bronze and iron were discovered, stone might continue to be used among the poorer and less civilised, whilst in our own country it is very probable that the iron instrument preceded the composite metal bronze which was in use on the Continent. At present, one cannot help thinking that many of those who explain to us the lacustrine dwellings of early times, and the buried flint implements and the inhabited caves, have far outstripped the facts at their disposal. An enormous antiquity has been claimed for earthen vessels found about the lake dwellings, on the ground that the lake dwellings *must* be enormously old; but an archæologist just sets them side by side with vessels known to be of the fifth and sixth centuries after Christ, of the sort known as Anglo-Saxon, and finds the form the same. Surely this marked similarity of form is worth more than any mere speculation as to what the age of the lake dwellings ought to have been.

And this brings me to consider a little more closely the work of the archæologist, and to recognise its dignity and worth. Archæology might be called the microscope of his-

tory; and we know that without the microscope neither geology nor physiology could have reached their present exactness. Ehrenberg computes that every cubic inch of a stratum of Tripoli powder at Bilin, in Bohemia, contains forty-one thousand millions of the *Gailonella distans*, and this bit of stone or pinch of powder, a thousand times more populous than this island of men and women, would have kept its wealth of life a secret but for the microscope. One may say that without this instrument the science of physiology could not exist. The services which archæology renders to history are of the same kind, and in the end they will probably not be less. For example,[1] the French Constitutional Charter of 1814 sets forth as an admitted fact of history that King Louis le Gros, being in full possession of kingly power throughout France, had seen fit to modify his power by the enfranchisement of the Communes, or in other words, by the granting of municipal charters. But the king really possessed full power only in the district lying between the Somme and the Loire, and with the establishment of communes in Burgundy or Brittany the king could have had nothing to do. But when one looks into one such enfranchisement one sees that there was little enough of this gracious surrender of actual rights. In the case of Noyon, it appears from old records that the cathedral clergy and the burghers were often at war. "Of the peace made between us and the burghers," is an entry found more than once in the cathedral annals. A bishop wished to put an end to this, and to avert a popular outbreak. Bishop Baudri called a meeting of the whole town, and submitted to them a charter, prescribing the mode of admission to the freedom of the commune, the duties of the burghers in war, and the mode of punishment for bloodshed; and the charter runs in the name of the bishop, and the punishment for violating it is the pain of excommunication. If it sets out "I have obtained from the Lord King Louis the concession of this commune, and its corroboration by the seal royal," the whole transaction is very different from that which was in the mind of those that mentioned it in the Constitutional Charter. It was the act of an enlightened bishop, in order to appease the irritation of an insecure population against a body of clergy both strong and oppressive, and the share of

[1] See A. Thierry, Lettres sur l'Histoire de France; Lettres 13 et 15.

the king in the transaction seems to be the least. He permitted to combine for self-preservation those whom he could not completely protect. And it is by the minute inspection of the facts of each age that we are able to correct the fallacies which sometimes underlie the very names that history employs. The France of that day was not the France that now feels one powerful central government through all its length and breadth. The word king in that day was very different from the word when applied to Louis XIV. And the value of this minute inspection is not merely that it reveals curious matters that were unknown before, but that it dissipates so much fallacy. To take an English example, not foreign perhaps to this moment, when one finds in the time of Edward III. memorials addressed to the king by the inhabitants of a town, demanding justice against some sheriff for having conferred the franchise on them, saying that they were "maliciously compelled to send men to parliament" (malitiose constrictos ad mittendum homines ad parliamenta), one's notions receive a certain shock. It is plain that we have possessed representative institutions longer than we have appreciated them. History repeats itself. Can it be that that mysterious entity, the compound householder, will hereafter turn and rend the able leader of the House of Commons for having maliciously compelled him to send men to parliament, and for having, as part of the machinery of his measure, permitted the cold shadow of the rate-collector to darken his doorway?

Yours is a young science in a rich world. Upon the face of this county we find marks of two primeval races; then the monuments of Roman power abound, and York itself was called "a second Rome." Anglo-Saxons, Danes, Normans, have written their names upon its page. About ninety religious houses received those who sought peace in flying from an unquiet world, instead of doing battle with its trials. Its churches are marvellous for their grandeur and their number: ten or twelve that are fit to be cathedrals might easily be counted. More than one great national struggle has steeped the soil in blood. These successive strata of our social and religious development have been very imperfectly examined as yet; and before a systematic history of their formation is written, patient, plodding, self-denying observations will have much to do. That much is

being done at this moment we are all aware. Next to the soil of England, perhaps Englishmen are most interested in that country from whence the Word of Life has come to them—the land which the Lord made holy by his footsteps—the land that for eighteen centuries seems to have been mourning in ashes the crime of having put Him to death. We could not stand in Nazareth, embosomed in its low and rounded hills—we could not shelter from the heat under one of the aged olives of the Mount of Olives, without our hearts burning within us with a sense of greater nearness to the heavenly. We of the English Church, known in those Eastern lands as Christians of the Book, have studied with peculiar care the scenes that throw light upon the Bible. Strange to say, the archæology of Palestine is still in its infancy. The jealousy of Mohammedans, and not less the jealousy of Christian sects towards each other, have hindered us from using the proper means, and the traveller has stood guessing and theorising upon some mound of earth, under which perhaps lay buried the monuments that would have solved the riddle, and set the guesses at rest. We have hardly broken ground in Palestine, though we know that the evidence we seek must be buried under the soil. But here too a beginning has been made. The Government has lately published an elaborate work full of exact measurements and plans, and of photographic reproductions. A Society has been formed for the exploration of Palestine, and a fortnight since I pleaded the cause of this Society in a long interview with Fuad Pasha, the powerful minister of the Sultan, who promised that every aid should be given to our explorers that was consistent with public order. "The Turkish Government," said this great man, "is tolerant to all, but the danger lies in the fanaticism of Christians against each other." "We too," he added, "believe in Christ, the Word of God, the Spirit of God, born of the Virgin, ascended into heaven, only the Crucifixion we do not believe." That is still, to Jews a stumbling-block, to Gentiles foolishness. But with larger powers our little Society will pursue its work, so far as its means allow, and a word of sympathy and a word of prayer from members of this body will be valuable to us.

The world is great and rich, and full of the bounties of its Maker. But to me its richest products are the thoughts

and strivings of men sent forth with the stamp of their Maker, but marred and defaced so that you can hardly read the image and superscription. These creatures, crowned with glory and honour, your science undertakes to follow in their sorrows, and sins, and strivings after good. You study the monuments they leave—of peaceful arts, of fiery warfare, of worship and domestic comfort, and social order, and death and mourning, and growth of races and decay. The subject is great indeed; it can only become contemptible when students, without reverence or soberness, discredit it with flippant guesses and frivolous conceits. To collect and decipher with the patience and diligence that suit a great subject, the monumental history of distant ages, is a task for the best minds; and we that stand by will admire and welcome you in the doing of it, and assist you if our power should reach so far.

MEDIÆVAL MILITARY ARCHITECTURE IN ENGLAND.

THE art of construction as practised in Europe from the fall of the Roman empire to the dawn of the Reformation, though of late years much and successfully investigated, has been approached almost exclusively from its ecclesiastical side. This was indeed, for many reasons, to be expected. The service of the altar justified, perhaps required, the highest degree of taste in the design of the temple, and the utmost richness in its ornamentation. Moreover, the greater number of our ecclesiastical buildings are still in use, and even the remains of those that are in decay, being chiefly monastic, are interesting from the intimate connection of their foundations and endowments with early piety and learning, and from the evidence supplied by their records, where preserved, of the descent of landed property, and of the ancestry of the older historic families of the country.

The coeval military structures exhibit, necessarily, no such splendour of design or richness of execution, nor do they awake such sympathies in our breasts. The parish church is the common concern of all who worship within its walls, or whose dead are laid within its sacred precinct; but the castle, always a dangerous and unpopular neighbour, and often associated with local tyranny or the disasters of war, was in most instances ruined or swept away with the general use of artillery; and, even where preserved, its narrow dimensions and inconvenient arrangements, circumstances adding to its value as a place of defence, render it, except in a few rare instances, unfit for modern residence, and thus tend to sever it from the current sympathies and interests of humanity.

Nevertheless, there is in these structures, obsolete as they are, or because they are obsolete, much to attract those who care to know of the life and customs of former generations. Many of these buildings were the work and residence of

personages who have left their mark upon the history of our country. Some, as Leicester, Wallingford, Norwich, Lincoln, Nottingham, were the seats of Saxon Thanes and Danish Vikings, succeeding to a still earlier Roman, or perhaps British occupation. Others, as The Tower, Windsor, Winchester, Berkeley, Pontefract, Carisbrooke, are associated with the splendours of our greatest and the miseries of our most unfortunate monarchs. Others, as Oxford, Northampton, Lewes, Kenilworth, are connected with great constitutional struggles between prince and subject. Some, as Exeter, Bedford, Rochester, Corfe, Chepstow, remind us of bloody combats and sieges from the times of the Conqueror to those of Charles I. Others again, as Hedingham, Bungay, Alnwick, Arundel, Wigmore, Goderich, Raby, Belvoir, are intimately bound up with the great baronial names of De Vere, Bigod, Percy, Fitzalan, Mortimer, Talbot, Nevill, and de Ros; while a very considerable number, as Ludlow, Shrewsbury, Bridgenorth, Chester, and the Welsh castles; Carlisle, Newcastle, Norham, Ford, Hermitage, Jedburgh, Berwick, and a host of subordinate towers and peels, are celebrated in marchman's warfare and Border minstrelsy, and in the politic but unjust aggressions of our earlier Henries and Edwards.

The remains of these fortresses are full of interest to the antiquary, whether his branch of pursuit be legal, architectural, or military. Most of the greatest and oldest castles, such as Richmond, Gloucester, Hastings, Clare, Totnes, Lancaster, Tutbury, Brember, were the 'capita' or chief seats of Honours and Baronies, having peculiar privileges within their garths and demesnes, and with manorial dependencies scattered through many counties, and held by the military tenure of guarding or repairing some specified part of the castle—tower, wall, gatehouse, or hall; to be paid either in person or by the commutation known as Ward-silver. The castle of Durham, like that of Chester, was the seat of an Earl Palatine, who, more fortunate than his lay brother, preserved his earldom and its almost regal appendages unshorn to the Reformation, and, with a splendid remnant of judicial and spiritual power, to our own day; and indeed, even now, though the mitre no more springs out of a coronet, nor is the crosier any longer combined with the sword, and the baronial hall is surrendered for educational purposes, the

Lord of Durham is not altogether wanting in pride of place, nor reduced, as yet, to even episcopal poverty.

To the student of military architecture, or of the art of defence before the general use of artillery, the details of castellated structures are exceedingly attractive. They are remarkable, sometimes, for the grandeur of their earthworks or the enormous passive strength of their walls; sometimes, for their happy position and skilful disposition; their arrangements for a vertical or a flanking defence, or, as at Arques, Dover, and Windsor, for their subterranean outlets and countermines. Even where the walls are destroyed, there often remain, in the earthworks, traces of a much earlier people than the Normans, who, as at Old Sarum, Marlborough, Berkhampstead, and Cardiff, occupied the ground with bank, mound, and ditch, long before native skill had attained to the construction of wall or tower. Finally, though the stern usages of war did not admit of the banded shafts, lofty vault, or woven window tracery of Fountains or Tintern or many a monastic church, the ornamentation of the richer castles has a chastened fitness peculiar to itself, and the ruins of very many have a savage grandeur of their own which few who have visited Caerphilly, or Harlech, or Scarborough, or Tintadgel, or Tantallon, can fail to appreciate, any more than that union of strength and beauty so conspicuous in Chepstow, Raglan, and Ludlow, and which attains its highest perfection in Warwick.

The history of such castles as have been connected with public events is not difficult to trace. They are mentioned by the ancient chroniclers and in the earliest records. Some, as Bamborough, Tamworth, and Tutbury, in their simpler and earlier forms, are recorded in the Saxon annals, and in Saxon charters even of the eighth century. Many, especially on the Marches, had their jurisdiction within which the king's writ was of no avail, their courts of record and of law, their Chancellor, Chancery, and official seal; consigning offenders to pit and gallows, and passing fines and recoveries and other early forms for the conveyance of land. Other castles, as Pool and Dinas Brân in Mid-Wales, Caerlavrock, Naworth, Home-Castle, and Roxburgh, in the northern Marches, constructed for the protection of an exposed frontier or debateable district, are commemorated in the records of either country. Others again were either permanently royal

fortresses, or from time to time, either by escheat or forfeiture, in the hands of the crown, and were therefore maintained at the public charge, and the cost and details of their repair charged in the public accounts of the realm. Some were purely military, intended only to contain a castellan and a garrison, and possessed little internal accommodation and no ornamental detail; in others the palace had the ascendancy over the fortress, the accommodation was ample, the apartments large, and the ornamentation rich, and thus the date of the several parts admits of easy inference.

What is wanting in the early accounts of all these buildings is a ground plan. The fabric rolls and specifications are now and then, as at Caernarvon, so minute that a skilful antiquary, like Mr. Hartshorne, was able to identify the work in the existing building; but an early ground plan is a very great rarity. In ecclesiastical buildings, from the known uniformity of the arrangements, this want is scarcely felt, but the details of a castle vary with the disposition of the ground or the caprice of the builder, and although a hall, a kitchen, a well, and perhaps a chapel, are indispensable features in most castles, these parts have nothing of the regularity of position of a nave or choir, a cloister, a chapter house, or a refectory.

There are also a numerous class of castles, which, built without licence from the crown during the wars between Stephen and Maud, came under the condemnatory title of "castra adulterina," and were for the most part levelled with the ground as the crown gained power in the reign of Henry II., and beneath the prudent rule of William Mareschal, during the early minority of Henry III. Of these castles there is generally a local tradition, but the actual remains are usually only light and indistinct lines indicating foundations.

What has been done towards a history of castellated architecture, though it has been strengthened not unfrequently by contemporary records, and especially by accounts and fabric rolls, depends mainly upon the internal evidence afforded by the buildings or the earthworks. Where the castle is a ruin, and the disintegrating effect of weather has had full play, it is not difficult to detect the relative age of the several parts by the thickness of the walls, and the character of the materials and workmanship, as well as by

the outline of the earthworks. The absence of ornament, and the general removal of window dressings and doorcases, often, it is true, render the absolute date difficult to discover, but these difficulties are trifling to those which are interposed where, as at Norwich, or Lancaster, or York, or Carmarthen, the building is converted into a gaol, or where, as in some parts of The Tower, the old work is encrusted by modern houses, and concealed with lath and plaster and wainscot. Warwick, so remarkable on many accounts, is especially so for the tasteful manner in which it has been made suitable for modern habitation, without obscuring in any degree its ancient parts, and this merit may also be claimed for Powis or Red-Castle.

Our county historians are usually diffuse upon the descent of a castelry or Honour, and the extent of its rights and tenures, but their descriptions of the buildings themselves are seldom intelligible, and never scientific. Even Surtees, so distinguished for the wealth and lucidity of his style, and whose history of Durham contains, entombed in folio, chapters that in a more accessible form would have met with far more than antiquarian attention, and who stands in many respects on the level of Dugdale as a county historian, rarely attempts scientific description. Hunter, whose histories of Hallamshire and the Deanery of Doncaster are perfect as records of the descent of families and of property, is not at home in architectural detail; and even Whitaker, who was quite aware of the interest which attaches to earthworks, gives plans of but very few of them, and says very little indeed about the particulars of the castles. To come down to the latest period, even Hodgson and Eyton in their histories of Northumberland and Salop, so copious and so accurate in all matters of record, pass by with slight notice the various earthworks, camps, and castles, the accurate details of which would be valuable; and far more so some sound general conclusion as to their origin, style, and points of difference and resemblance, to which it is the duty of a topographer to pay attention.

The great work of King, the Munimenta Antiqua, though half a century older than most of the above, and full of absurd theories and fanciful descriptions, is yet tolerably accurate in its plans, and on the whole a valuable work for military remains. The Vetusta Monumenta, a publication

of the same school and period, includes a few castles, and gives their plans and sections clearly, and to a large scale. Unfortunately the descriptions are either altogether wanting, or meagre and unscientific. The voluminous works of the industrious and accurate Britton include but few castles, being chiefly confined to ecclesiastical and domestic architecture. Finally, the well-known drawings of the brothers Buck, and those given by Grose, though, notwithstanding their incorrect perspective, they serve, with some assistance from the sketches of Paul Sandby, to show what the buildings represented were 70 or 80 years ago, are grievously wanting in detail; nor are the descriptions of Grose of any great value.

Since the rise, within the last twenty years, of the numerous local archæological societies, castles have received a larger share of attention. Mr. Hartshorne has entered largely into their histories, and a few good descriptions have appeared; but England has as yet produced no special work upon military architecture, although many of the best castles have been noticed, and their plans and certain of their details are given with minute and valuable accuracy in the excellent volumes of Mr. J. H. Parker upon Domestic Architecture.

England contains, it is true, many very curious, and some very grand examples of military architecture, but that insular position and those industrious habits which have given her the blessings of internal peace, and made her children prosperous, have not been favourable to the erection of fortresses of the larger class. For these we must pass to the Continent, and more especially to France. There, each of the great duchies and scarcely subordinate kingdoms of which that monarchy is now composed, were in the eleventh and twelfth centuries independent states, each with an open frontier needing defence, and with a brave and wealthy baronage very willing and very able to supply it. Hence France contains within its present borders the remains of the castle-palaces and palace-castles of the Dukes and Barons of Normandy and Brittany, of Burgundy and Provence, of Lorraine and Navarre, of Flanders, of Anjou, and of many a minor province; and he is ill-qualified to judge of castles or of fortified towns, who is unacquainted with Arques, or Falaise, or Loches; with Coucy, or Chateau-

Gaillard, or Étampes; with Carcassonne, or Avignon, or Villeneuve, or Beaucaire, or the splendid and accurate restoration of Pierrefonds.

Moreover the possession of these great works has created, though very tardily, a few writers capable of comprehending and describing them. So far as they occur in Normandy, where indeed they are most numerous, they have entered into the well-known lectures of M. de Caumont upon monumental antiquities, delivered at Caen in 1830, and published in 1835. These contain a very interesting section upon military works. The plans and elevations, though somewhat roughly executed, and on too small a scale, are very valuable; his descriptions are clear, and his conclusions for the most part sound. Others before him have described particular structures, but he seems to be the first who has attempted a general classification, based upon a critical examination of the numerous extant examples in his own province.

Of detached writings must be mentioned those of M. Deville on Chateau-Gaillard, Tancarville, and Arques, published in 1829, 1834, and 1839; the first peculiarly strong in the history of the castle and its famous siege, and the last excellent both in its history and its description, and all accompanied by clear ground plans.

The great work of M. Viollet-le-Duc, though not confined to military architecture, and not yet completed, does nevertheless, in the parts already published, contain by much the most comprehensive as well as the most detailed account of French castles yet given to the world; and as, besides the general resemblance between all European castles, those of the eleventh century in Normandy are almost counterparts of those of the same period and often built by the same nobles, or their sons, in England, it has deservedly become our chief authority. Also, the castles of France being generally on a larger scale and in better preservation than those in England, M. le Duc has been enabled to explain more fully than could have been done here, certain details, such for example as those of the gateway, drawbridge, and portcullis, and especially of the timber superstructures for vertical defence, known as *Hourdes* or *Bretasches*, terms represented with us by the "hoard" of London builders, and the "brattice" of mining engineers.

M. le Duc's work has already given rise and matter to a

special volume in English on the subject of French castles, from the press of Mr. Parker, which will doubtless be reprinted and expanded when the completion of the "Dictionary" shall provide additional information.

There is besides a work in German, "Geschichte der Militär-Architektur des frühern Mittelalters," by M. G. H. Krieg von Hochfelden, which contains much that is of great interest concerning the earlier German castles, as well as a general notice of those in France and England.

Although military architecture in England, setting aside the works of the Romans, begins with the age, and probably with the actual period, of the Norman conquest, the country contains numerous examples of military works of an earlier, and in many instances no doubt of a very remote time. These works, executed in earth, or at least of which nothing but banks, mounds, and ditches remain, are sometimes of great size, but usually of extreme simplicity of plan. Of most of them, the Roman again excepted, the relative age is all that we can hope to ascertain, but even from this knowledge we are at present very far; and although it is probable that the simple encampments, of irregular outline, and on high ground, are the work of the earliest inhabitants of Britain, and those of circular or more regular outline, having higher banks, and placed in more accessible positions, are the works of the concurrent and post-Roman periods, yet the outlines are often so mixed, and the arrangement of the mounds and banks so alike, that it cannot always certainly be said what is sepulchral, what merely commemorative or monumental, and what military; what the works of the earlier or later Celts, what of the Saxons, what of their Danish conquerors, and sometimes even, though not often, what is Roman.

The particulars of these various earthworks, so different in plan, and extending over so many centuries, deserve a separate notice, and therefore though originally intended to have been discussed in this paper, it seemed more prudent to lay this branch of the subject aside for the present, in the hope that it may be taken up when the completion of the larger scale Ordnance Maps shall afford more accurate and copious data than now can conveniently be procured. The subject, in fact, should have entered into the instructions given to the officers of the Survey, by which means we

should at least have avoided the obscure and sometimes contradictory system of nomenclature by which these works have been designated at different periods of this great, and in most respects admirable, national undertaking.

But, although it be expedient to pass by in silence those earthworks, irregular, rectangular, or concentric, which have no direct connection with the subsequent castles of masonry, and therefore with military architecture, there remain, nevertheless, certain earthworks which are so connected, and which must therefore here be noticed.

These earthworks occur in most parts of England, and especially in those provinces north and east of Watling Street, so full of Danish names and traditions; and they are found still more commonly in Normandy, where they are the known strongholds of barons of Danish or Norwegian descent. On the other hand, they are by no means unknown in Saxon England, and in the south and west, and upon the Welsh border, where the Saxons are known to have penetrated. Many of these works also, in England, are recorded in the Saxon chronicle as the work of Saxon monarchs, and they were certainly, in the centuries preceding the Conquest, the seats of thanes and earls of both Saxon and Danish blood. Sometimes, further to complicate the question, they are found mixed up with Roman works, so that they have in part been regarded as of Roman origin.

These earthworks may thus be described. First, was cast up a truncated cone of earth, standing at its natural slope, from 50 to 100 ft. diameter at the top, and from 20 to 50 ft. high. This was usually, perhaps always, formed from the contents of a surrounding ditch, now often filled up.

Connected with this mound or *motte* was a base court or enclosure, commonly oval, but now and then circular, and even rectangular, contained within a high bank of earth, outside of which was also a ditch. Usually the mound was near one end of the enclosure, in a focus of the ellipse, but not unfrequently it stood on the line of the bank, at one end or in one side of the enclosure, and thus formed a part of the outer defence.

The entrance was by a notch in the bank, usually at the further end from the mound, and the approach wound round the exterior of the ditch, so as to be commanded from the bank.

Outside this base court or ward, but applied against it,

and often covering the entrance, was generally a second enclosure, also within a bank and ditch; and in many cases, on the other side of the base court, a third enclosure. Sometimes all three were in a straight line, the mound being in the central space, and sometimes they formed a sort of triangle. These works were very rarely indeed concentric.

The earthworks are all of the original fortresses that now remain to us, but there is not wanting evidence of the manner in which they were completed. Upon the mound was the house of the lord, of timber, approached by a steep bridge, also of timber, laid across the ditch and extending some way up the mound.

Around the base court, ranged along the scarp or inner edge of the ditch, and upon the bank, was a strong and close palisade of wrought timber; and within this were the timber houses and sheds for the dependents and the cattle. Probably the outer enclosures were less strongly defended and intended to contain cattle alone. The palisade was reinforced by occasional wooden turrets. The Scandinavians disliked enclosures of masonry, and were not adepts at its construction. With the use of timber their seafaring experience had made them familiar.

These earthworks are often so complete as to tell their own story, but M. de Caumont cites a contemporary account, written about the end of the eleventh century, which places the whole arrangement graphically before us. The author is a certain Colmiu, Archdeacon of Terouane, in his life of St. John, a canonized prelate of that church. "The rich and powerful," he intimates, "first secure a strong place for their personal safety, and the keeping of their prisoners and their wealth. They commonly throw up a mound of earth, surrounded with a deep ditch, upon the inner edge of which they establish a stout palisade of squared timber, strongly bound together, equal for defence to a wall, and strengthened by turrets or towers. Upon the centre of the mound is placed the residence, only to be approached by a steep bridge across the ditch." This description is illustrated by the Bayeux tapestry, upon which is represented the taking of Dinan. Here is seen the conical hill surmounted by a timber building, which two men are attempting to set on fire, whilst others are ascending the mound by the steep bridge, reaching nearly to a gateway at its summit.

Sometimes, as at Tutbury, this regular fashion was departed from, to take advantage of a naturally strong outline, though even here the mound, of large size, stands on one side of a base court, about two-thirds of which is defended by a bank and ditch, the other third having a naturally steep face. At Bamborough and Scarborough, places naturally high and of great strength, the mound is dispensed with. At Wallingford, Hereford, Cardiff, Leicester, Tamworth, and at Stamford, the enclosure is or was open towards the river on one side.

Such having been the nature of a Northman's or Saxon's castle, it may readily be understood how they came to be so rapidly constructed, and so readily destroyed. Thus, according to the Saxon chronicle, King Edward, in 913, constructed the northern fortress at Hertford, between the Mimram, the Beane, and the Lea, the southern fortress south of the Lea, and fortified Witham, where the earthworks yet remain, while Ethelfleda constructed the fortresses of Tamworth, Stafford, Eddisbury, Warwick, Chirbury, Warburton, and Runcorn.

Tamworth was a royal Saxon seat in the eighth century, but probably the earliest Saxon work the construction of which is recorded in history is Bamborough Castle, thrown up by Ida in 547, and defended originally by a hedge, and afterwards by a wall. The name is derived from Bebba, Ida's wife.

Ina constructed Taunton Castle, destroyed by Queen Ethelberga in 722. Morcar was the Saxon lord of Brun or Bourn in 870, where part of the mound remains, and the lords Wake had a castle.

Ethelfleda, lady of the Mercians, burnt Bramsbury in 910. Her works in 913 have already been mentioned.

In 920, King Edward repaired and fortified Maldon, and in 921 the Saxons threw up works at Temsford and abandoned those at Huntingdon. In 922, King Edward fortified Stamford town, on the south side of the river, and in 924 threw up a fort near Bakewell in the Peak.

In 1052, when the Confessor and Earl Godwin came to terms, and the attack upon London was set aside, Robert, Archbishop of Canterbury, and his Frenchmen fled, some westwards to Pentecost Castle, and some northwards to Robert's Castle, evidently two native fortresses. In 1055,

Earl Harold, expecting a Welsh attack, dug a ditch round Gloucester, and in 1065 he prepared to erect defensive works at Portskewet, near Chepstow, and collected materials there.

In 1067, Hereford Castle is mentioned, which was of course the pre-Norman work of which the mound remained for centuries, and much of the banks and ditches are still seen. Norwich Castle, occupied by the wife of Ralph de Guader in 1075, could scarcely have been more than the old Saxon stronghold, and although Worcester, Bristol, Rochester, Tonbridge, Durham, and Pevensey are mentioned as castles in 1088, it is probable that they were mere palisaded earthworks, and not the strong towers of masonry which about that time were constructed, and, in the case of Pevensey, added to the Roman building.

Nor are the remains of these peculiar strong places confined to those recorded in the Saxon annals and other historical works. A careful examination of Yorkshire, Lancashire, Cheshire, and Stafford, has discovered many others, some of which correspond in position to the aulæ of the Saxon thanes recorded in Domesday. Thus Dudley was a Saxon seat. Edwin Earl of Mercia, Lord of Strafford Wapentake in Yorkshire, had an aula on the mound at Laughten-en-le-Morthen, and Coningsborough mound was the centre of a royal fee. The Saxon Earl of Richmondshire had an aula at Gilling, the earthworks of which remained within a century. The mound at Halton was crowned by the seat of Earl Tosti. At Berry Banks, near Stone, dwelt Wulfer, King of Mercia; the chief seat of the Saxon lord of Hallamshire is not known, but in that district the great thanes were Waltheof, Tosti, Sweyn lord of Sheffield, and Harold, whose seats must be sought in the mounds and banks of Castle-Hill and Castle-Bailey near Bradfield, the Castle-Hill at the meeting of the Sheaf and the Don, Tickhil, and Mexborough, to which may be added Melling and Hornby in Lonsdale, the Castle Hill at Black Burton, Robin Hood's Butt at Clapham, and Sedbury or Sedda's Burgh, all well marked Scandinavian earthworks with oval areas, mound, bank, and foss. Such also are, in Yorkshire, Castle-dykes at Sedesal and Langwith, Maiden Castle at Grinton, Coningsborough, and Kirkby Malessant, Stamford in Lincolnshire, besides very many others.

Where the bank is oval or circular and the mound evidently an integral part of it, the work is of course of one date, and probably Scandinavian, that is Saxon or Danish, and of the post-Roman period ; but these mounds are found also within enclosures rectangular in plan, and which, either from internal evidences, or from history, or from the discovery of coins or remains, are supposed to be Roman. Such are Leicester and Wallingford, Tamworth, Wareham, and probably Plessy. Auldchester, the Roman Alauna near Bicester, with a Roman camp of 1000 ft. square, has also an artificial mound called Castle-hill. Leicester, an admitted Roman city, has a mound in its south-west angle, on the river bank, at the upper end of the stream. Wallingford, with banks that must be Roman, has a mound at its north-eastern angle, also on the river bank, at its upper end. Tamworth, rectangular, has its mound near the centre of the river on the southern side. At Wareham, the mound is also on the river bank, up stream, at the south-western angle of its rectangular enclosure. But Leicester was the seat of a succession of Saxon earls, Wallingford of a thane of great wealth, Tamworth of many Mercian kings, and Wareham was a Saxon town of considerable importance. Were these mounds of the date of the containing banks, or were they Saxon additions ? Or were they older than all, pre-Roman, the work of the Britons ? Mere exploratory mounds, what in later days were called Cavaliers, they could scarcely be ; they are too large, and occupy what might in each case be the prætorium of the camp. But the Roman prætorium, or the citadel, which in permanent stations succeeded it, was not placed on an artificial mound.

At Hereford, the banks are rectangular ; but the mound, which was also near the river, had a Saxon history. At Cardiff, where the banks are no doubt Roman, the mound is towards the river, but here is no record of a Saxon occupation.

Still, on the whole, there seems sufficient evidence to regard these large mounds as of Saxon or Danish origin ; generally part of an original work, sometimes an addition, as a citadel, to banks already in existence, and usually, if not always, Roman.

It is thought that many of these mounds, used by the Saxons for security, may have been cast up by the Britons

as sepulchres. Of course this may be the case, and as few of them have been opened, little is known of their interior. But they were regarded, even in Saxon times, as military; and in most cases it is pretty evident that they are of the age of their connected banks, which must be military. Silbury and Brinklow, both mounds of the largest class, have never been regarded as military; and the distinction between a sepulchral and a military earthwork seems always to have been preserved. A "low" is always sepulchral. Probably also a Saxon, one of a race not unaffected by superstitious influences, would have objected to the employment of a sepulchral mound as a foundation for his dwelling-house.

When, therefore, we are told that the Conqueror found no castles in England, and that Domesday enumerates but forty-nine, we are to understand that this limits the term to towers of masonry, such as had come into use in Normandy; for it is very certain that every Honour and almost every Soke and large estate had its fortified aula, and probably the residences even of the ordinary thanes were entrenched.

The Celtic entrenchment was intended to protect the tribe, and the Roman encampment or station for the defence of the empire; but with the Northmen came in a greater prominence of the right of private property, and their strong places, as they became settled in the country, were constructed less for its general security than for the protection of particular estates and families.

It was this individuality, the growth especially of the eighth and ninth centuries, that lay at the root of the feudal system. Each man who acquired land, sought also to possess a stronghold for his own safety and that of his tenants, and from which, like the Scottish borderer of later days, he could sally forth and win a subsistence by the aid of horse and arms, or, as the marchmen phrased it, "with snaffle, spur, and spear." Military tenure arose naturally in such a state of society. It provided mutual support to both lord and vassal, the collective vassals giving power to the lord, who, in turn, secured to each man safety. All were, in a sense, equal. No man was degraded by such tenure. The most powerful barons were almost always, also, vassals, holding fiefs under persons often of rank inferior to themselves.

The military tenant was bound to serve his lord in war, and to defend his residence when attacked. From the history of Norwich Castle it appears that this latter obligation was of early date. It was known in the ninth and common in the tenth century. It was called Castle Guard, and was very precise, each tenant having to defend a specified part of the castle, as the gateway, chapel, hall, wall, or towers, all which are pointed out with the titles of the barons in the Registrum Honoris de Richmond. At Belvoir Castle, Stanton tower was so called because a tenant of that name held his land by the obligation of repairing and defending it.

For the correct appreciation of the military works established in England after the Norman Conquest, it will be necessary to show briefly what was the state of military architecture in Normandy, and from what it arose.

In Normandy are found very numerous earthworks exactly resembling those already described in England, the typical features being the mound, oval bank, circumscribing fosse, and one or two exterior appendages, each with its proper defences.

Within a radius of about sixty miles of Caen, M. de Caumont enumerates about fifty-four of these strong places having mounds, or, as they are there called, "mottes," and some in which this feature is double, as with us at York, Canterbury, and Stamford, besides a few in which the mound is either wanting or is represented by naturally high ground, scarped and dressed by art.

So far, therefore, the works of the Northmen in England and Normandy displayed a marked resemblance. This continued down to the tenth century, when the Normans took a considerable step in advance. Their seigneurs, no longer content with keeps of timber, constructed towers of stone, almost always rectangular, and placed them, not upon the mound, which would afford a very insecure foundation for so great and concentrated a weight, but within the enclosure, the palisade of which they afterwards, often long afterwards, as occasion served, exchanged for a wall.

These rectangular stone keeps came into fashion in the eleventh century,[1] and in the course of Duke William's

[1] The rectangular Keep of Langeais (Indre et Loire), built by Fulk, Count of Anjou, in 992, is one of the earliest known. It has, says M. Caumont, much of the Roman method of building, especially in its arch heads of brick.

reign grew into general use; and, in some instances, as at Arques, were of very great strength. So far as has been ascertained, although the Norman style began to be used in England under the Confessor, no Norman castle was constructed there until after the Conquest. This might be from the unwarlike character of the king, or from the general dislike felt by his nobles towards the Normans—a feeling which, a century later, had prevented the construction of any Norman castle in Scotland, although the Norman style is not uncommon in Scottish church architecture.

What invests these castles in Normandy with so strong an interest to the English inquirer, is, that from them came those great families who played so important a part in the subsequent history of England, and which gave to their owners those names so familiar to our English ears, but so seldom derived from or borne by any English ground. Such are D'Evreux, Bailieul, Bolbec, Cantelo, Courcy, Fontenay-le-Marmion, Granville, Montgomery, Mortimer, Umfrevile, Venables, and Vernon, of whose lords some cast in their lot at once with England, others retained a divided interest until driven by Philip Augustus to a forced selection, and others again shared their estates between an elder and a younger son, whose descendants sometimes, as with the Harcourts, asserted their common origin, after a separation of more than seven centuries.

In Normandy, moreover, the lords of the castles sprung from those who had actually constructed them and inhabited them from their commencement; whereas, in England, the corresponding families were extinguished, and their places taken by the Norman intruders. And it is this grafting in of the Normans upon the Saxon seats which has preserved and enhanced the name and fame of the latter.

As the Saxons, like the Normans, upon their permanent settlement in a country, and their acquisition of landed property, erected their estates into a manor or lordship, and attached this to the residence of the lord, it became very much the interest of the Anglo-Norman who got a grant of Saxon lands, to place himself as far as possible in the very place of the Saxon thane, abiding in the "aula," which was the social and judicial as well as the military centre of the fief, and to which the tenants were accustomed to look

for protection and justice. Hence it is that the castles of almost all the earlier Norman barons show evidence of a pre-Norman occupation, and have a Saxon history.

Where this is not the case, as in the later, and often in the inferior castles, the grand characteristic—strong earthworks—is wanting, and their place is supplied by defences of masonry and a ditch of moderate dimensions. The same remark applies to the works of the Normans who supplemented the English Conquest by their invasion of Middle and South Wales. At Hereford they found and built upon the Saxon earthworks, as at Chirbury, Montgomery, and Presteign; and so at Coyty, the seat of a Welsh lordship, they seem also to have found and adopted ancient earthworks; but in the smaller and often somewhat later castles, so numerous on the Marches, and throughout the South Welsh counties, the earthworks are usually very light, and the defences of a less laborious and more scientific character.

The first care of a Norman lord on obtaining seizin of a Saxon estate, was to provide a strong and safe refuge for his followers and himself. With this view he repeated in England what he or his immediate ancestors had already done in Normandy. He constructed a square tower of no great architectural or military merit, but of great passive strength, and which, in case of an attack, could afford protection to his immediate dependents, and the artificers engaged in completing the outer defences. If he dealt with an earlier work, he built, not on the mound, but on undisturbed ground within the enclosure.

Sometimes, as at St. Leonards, Wattlesborough, Goderich, and Ogmore, these keeps were of small dimensions, 20 ft. to 25 ft. square, and 40 ft. to 50 ft. high. Under more favourable circumstances, as at Bamborough, Norwich, and The Tower, they were of very considerable magnitude—80 ft. to 100 ft. square, and 90 ft. high. Sometimes, as at The Tower, St. Leonards, and Goderich, they are very plain; at others, of later date, as at Rochester, Hedingham, Dover, and Newcastle, their details are highly wrought. But, however constructed, large or small, ornate or plain, the rectangular keep is the one typical feature of a Norman castle, the most constant, the most striking in appearance, and the most usually preserved, even to our own day. These keeps, of

great passive strength, having been built with attention both to material and to labour, are usually standing when all else is in ruin, and thus they appear of later date than were the less substantial additions of the fourteenth or fifteenth centuries.

Having premised thus much concerning the manner in which the Normans of the eleventh century availed themselves of, or added to the works of their predecessors, it will be convenient next to describe in some detail an ordinary Norman fortress.

G. T. CLARK.

(To be continued.)

NOTICES OF ANTIQUITIES OF BRONZE FOUND IN DEVONSHIRE.

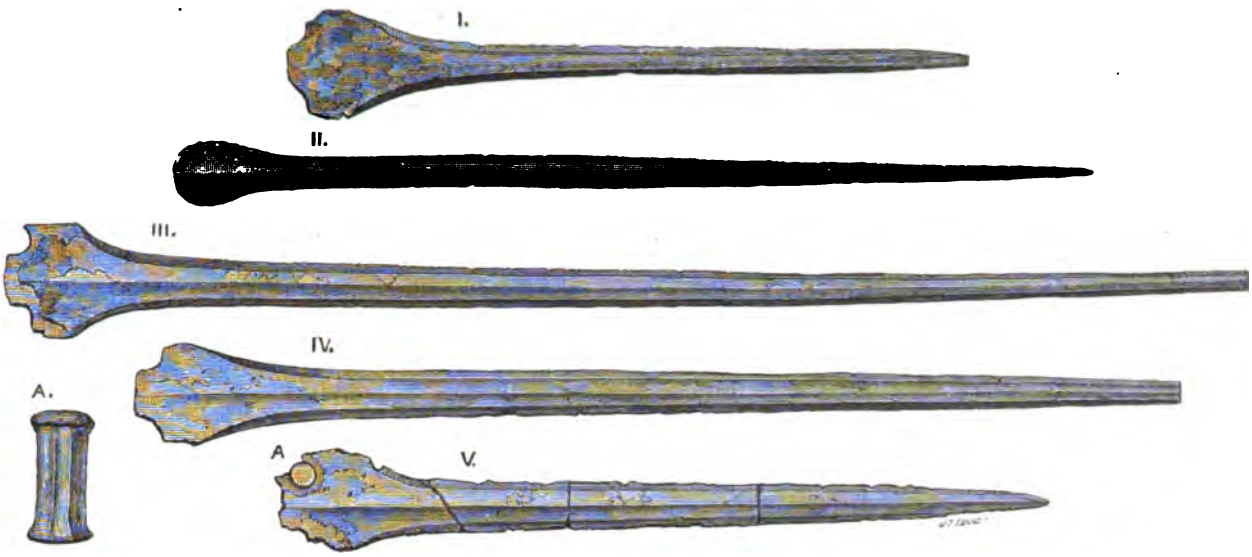
By CHARLES TUCKER, F.S.A.

In January, 1867, a discovery of some bronze weapons of remarkable character occurred in Devonshire, which I had the pleasure of bringing under the notice of the Institute at the Monthly Meeting in London in April. On a former occasion I had been enabled to communicate from the same county an account of two curious stone moulds for casting blades of metal of a peculiar type, exactly similar to that of the weapons recently brought to light in Devon. An account of that discovery will be found in this Journal;[1] the representations of the moulds, here again given, cannot fail to be acceptable in illustration of the present notices.

The weapons lately found are six in number; they are of bronze of fine quality, and are examples of the comparatively rare type of long, regularly tapering blades, formed so as to be affixed to some kind of haft by means of rivets, and thus presenting a very distinctive variation from the bronze leaf-shaped swords, that are of frequent occurrence in the British Islands and also in many parts of Europe.

The dimensions of the blades, the recent discovery of which I proceed to relate, vary from 22 in. to 12 in. in length. Five of them are here figured, on a reduced scale, and also one of the strong rivets, the means by which the weapons of this description were affixed to their hafts. Three of the blades are, unfortunately, imperfect; they measure, in their present state, 22 in., 19 in., and 15 in., respectively, about two inches or somewhat more having been broken off, as shown in the accompanying woodcuts. Indications of rivet-holes may be noticed in each instance, but the edges of the broad end of the blade, that was intended to be adjusted to a haft of some description, are mostly very thin in the weapons of this class; here, as in other examples, the margin has decayed and partially broken away. Of the

[1] Arch. Journ. vol. ix. p. 185.



Bronze weapons found January 1867, in the parish of Talaton, Devon. Length of No. I., 12 inches; No. III., 22 inches.
A. Bronze rivet, same size as the original.

three other blades, one, that measures 14 in. in length, was found broken into three pieces, but the point is perfect and one of the rivets remained (see woodcut, orig. size), and two, measuring 16 in. and 12 in., respectively, have likewise their points unbroken, but decayed by oxidation, as are likewise their other extremities and the holes for the rivets. These weapons, it will be observed, have the usual sharp central rib that served to give strength to so thin a blade. Only one rivet was found in its place; several others that had fallen out and were overlooked by the workmen have been subsequently found. Three of the blades are coated with a peculiar brownish patina, on one it is almost of a golden colour; the others have the usual green incrustation; the variation, no doubt, arising from some peculiarity in the water or the soil.

The site of this discovery is a meadow, on the estates of Sir John Kennaway, Bart., called Ryland Field or Park, about three fields distant from Larkbeare House, in the parish of Talaton, and adjoining a parochial road leading from Larkbeare and Escot, by a spot called Holy-ball Springs near Larkbeare Pool, to the great highway known as Straightway Head, a portion of the great line of Roman road (on the course doubtless of the British Ikeneld)[2] leading from *Muridunum* to Exeter, the *Isca Dumnuniorum* of Antoninus' Itinerary. The actual spot where the discovery occurred is about half a mile to the north of the Via Strata, and almost abuts on the line of an ancient British track-way leading to the great camp known as Hembury Fort, a vast earthwork with triple vallum, at the extremity of the Blackdown Range.

The weapons were found during some operations for draining the meadow; they lay 3½ ft. below the surface of the old pasture; three of them placed side by side in the line of the intended drain, and the other three a short distance off.

A circumstance which renders the finding so many examples of this long, taper type of blade in Devonshire peculiarly interesting, is their striking conformity to the weapons which the castings from the stone moulds above

[2] See in Lysons' Magna Brit., Devonshire, vol. i. p. cccxii. the account given by the Bishop of Cloyne of this line of way, that followed for the most part that of an ancient British road, entering the county at Axminster, where it has preserved the British name of the Ikeneld Way. This line appears to be distinctly traced across Devon towards the great marts of trade on the Cornish coast. The *Iter* from *Vindomis* to *Isca*, passing by Dorchester, Axminster and Honiton, may be seen in the Itinerary of Antoninus; edit. Parthey, 1848, p. 233.

alluded to, as occurring in the same county, would present. Of these, two, each formed of two equal moieties, were found in 1852, in a field adjacent to the village of Knighton, in the parish of Hennock near Chudleigh, in digging for the pottery clay, at a delta formed by the rivers Bovey and Teign; the longest mould (length 24½ in.), was placed vertically in contact with the fine white clay of commerce; the shorter (length 21½ in.) was in a horizontal position; the parts were in due apposition, but they separated when moved.

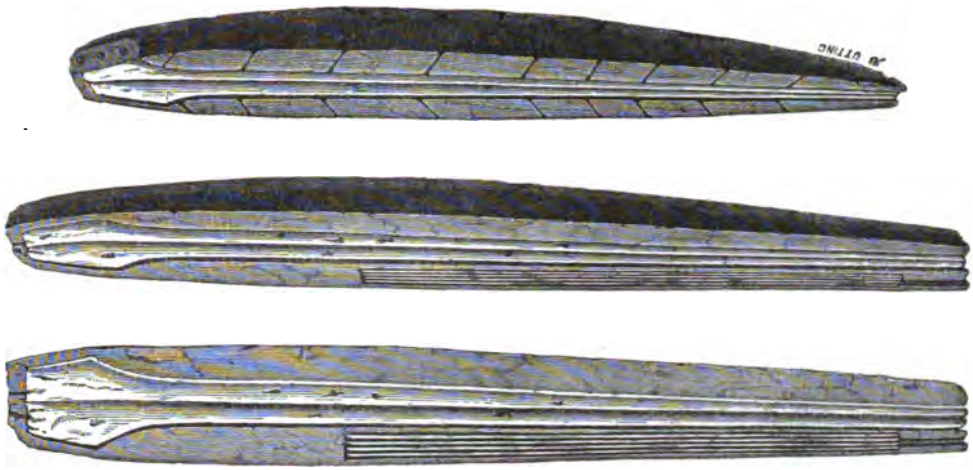
They were under six feet of sedimentary gravel, bouldered pebbles, &c., with two feet of earth over the pebbles. The stone of which these moulds are formed is a strong micaceous schist of a light greenish colour, similar to that found in Cornwall, and very heavy, the pair of moulds weighing about 12 lbs. These remarkable objects came into the possession of the late Mr. Davey, of Knighton, who was connected with the clay works, and they now remain with his family. It is most desirable that such highly curious relics should be deposited in the National Museum.[3]

It may be worthy of remark that, although many moulds formed of stone and of bronze for casting spear-heads, celts and palstaves of various forms have been discovered, and that, since the discovery at Knighton in 1852, this evidence of the actual manufacture of bronze weapons and implements in Britain has repeatedly been brought under the notice of archæologists,[4] the occasional occurrence of objects of the like description on the Continent having also been recorded,[5] no other moulds for casting the long thin blades should have been brought to light. It is believed indeed that no moulds of a similar kind are known, and, moreover, that neither in the British Islands nor on the Continent has any similar

[3] Some further particulars may be found in this Journal, vol. ix. p. 185.

[4] A considerable number of moulds, of stone or bronze, for casting celts and other objects of metal, were described by Mr. G. V. Du Noyer, in 1847, and figured in this Journal, vol. iv. p. 335. A more ample enumeration of such moulds may be found vol. xviii. p. 166, in the account of the Special Exhibition of Antiquities of bronze, at one of the meetings of the Institute in London in 1861. Other notices of these remarkable relics may be found in Catal. Mus. Roy. Irish Acad., by Sir W. R. Wilde, p. 392, and in a Memoir by Mr. Albert Way, Archæologia Camb., vol. ii. third series, p. 120. See a notice of a bronze mould found in Sussex, in this Journal, vol. xx. p. 192; Sussex Archæol. Coll. vol. xiv. p. 171. A bronze mould for palstaves, found in the Lake of Geneva on the site of the Pfahlbauten at Morges, is figured in Mr. Lee's valuable translation of Dr. Keller's Memoirs on the Lake Dwellings of Switzerland, pl. xxxix. p. 195.

[5] In the Universal *Exposition* at Paris four moulds for celts were exhibited, one of them of Stéachiste. Catalogue, Histoire du Travail, p. 40, nos. 355—358.



Stone Moulds for casting Bronze Weapons. Found in the parish of Hennock, Devon, 1852. Dimensions.—A, length 24½ inches; greatest width 3 inches. B, length 21½ inches; width 3 inches.

appliance been found for casting the "leaf-shaped" sword blades that occur in such ample variety in our own country and also in Germany, Denmark, and other foreign lands.[6]

In connection with the peculiar slender tapering blades, such as those recently found in Devonshire, and the stone moulds for casting weapons of this type likewise brought to light in that county, attention may again be invited to the occurrence of a shallow grooved cavity on the side of one of the moulds (see woodcut). This would produce a thin slip of bronze, about 14 in. in length, sharply ribbed on one side and flat on the other. Amongst numerous Irish antiquities in the collection formed by Mr. R. H. Brackstone, there is a narrow slip of bronze of similar fashion and dimensions, length 15 in., ribbed, however, on both of its sides. It has been conjectured that, in either case, such an object, whether ribbed on each side or on one only, may have served to sharpen weapons in like manner as the instrument called a "steel" now in use. It is hoped that renewed notice of so curious an object, associated apparently with the type of blades that form the principal subject of the present memoir, may call forth some further suggestions in regard to the purpose for which it was intended.

The weapons of this long taper fashion, although comparatively more rare than the "leaf-shaped" swords, and of more frequent occurrence in Ireland than in Great Britain, are to be found in several public and private collections. They vary considerably in dimensions. I may first notice, as more directly connected with the county from which the curious relics already described have been obtained, that a specimen in perfect preservation had been brought to light by the plough at Winkleigh, near Crediton, in North Devon, on the verge of a barrow adjacent to the old road from Exeter to Bideford. The length of this blade is 17 in. (See woodcuts, p. 120.)

The earliest discovery of bronze weapons of the peculiar type under consideration is, so far as I am aware, that recorded on the authority of the Welsh antiquary Llwyd. In 1688, about fifty bronze weapons were found deposited under a great stone in a place described as "Kareg Dhinin," in the parish of Beddgelart, Caernarvonshire. These relics

[6] A singular bronze mould and core for casting sword-handles may here deserve mention. It was found in Italy, and is preserved at Munich. See Lindenschmit, die Alterth. uns. heidnischen Vorzeit, Heft i. taf. ii. fig. 10, 12. It is noticed in Sir W. Wilde's Catal. Mus. Roy. Irish Acad. p. 449.

consisted of short swords or daggers, 1 ft. to 2 ft. in length, some of them flat, some quadrangular; several, as it is stated, were gilt; the greater part, however, when found, were covered with a bluish rust. A few had two bronze nails riveted on each side through holes in the edges, as in many other objects of this class. Such, it is observed, had been found elsewhere in Wales. There was also a palstave; but, unfortunately, no precise notice of this deposit appears to have been preserved.[7] The large hoards of bronze objects and broken metal that have occurred in the Principality, and also in other parts of the British Isles, are very remarkable. The deposit disinterred at Guilsfield, Montgomeryshire, in 1862, consisted of not less than 56 celts, broken swords, scabbards, spears, &c., with about 50 other fragments and a lump of fused metal; a similar discovery, in 1859, at Pant-y-maen near Glancych, Cardiganshire, brought to light 27 bronze relics of the same description, besides numerous fragments.[8] No example, however, of the taper "rapier blade" occurred in either of these two large hoards of bronze. These facts, combined with the repeated discoveries of cakes or ingots of metal, and especially of moulds for casting celts, spear-heads, and other objects of types familiar to the English antiquary, present striking evidence of their actual manufacture in Britain.

I proceed to notice other examples, some of which have been exhibited at Meetings of our Society. In the National Collection there is amongst other specimens one that belonged to Mr. Roach Smith; it was found in the Thames at Maidenhead, and had been presented to him by Mr. Alderman Venables. This blade measures 10½ in. in length, and it appears to have been perforated for two rivets, but the edges at that part are broken away and much damaged.[9]

In the Armoury at Goodrich Court a specimen may be seen, designated by the late Sir S. Meyrick "the earliest style of spear-blade, termed gwaew-fon." It measures 13 in. in length.[1]

[7] Camden's Britannia, edit. Gough, vol. iii. p. 185, pl. viii. It should appear by the engraving of a portion of one of the blades, there represented as broken, that it was an example of the taper weapon with two rivets, precisely similar in type to those found in Devon and elsewhere as above noticed.

Memoir by the Rev. E. L. Barnwell, Arch. Camb., vol. x. third series, pp. 212, 221.

[9] Catalogue of Mr. C. Roach Smith's Museum, subsequently purchased for the British Museum, p. 81, no. 361; Journ. Brit. Arch. Assoc., vol. i. p. 311.

[1] Skelton, Engraved Illustrations of the Goodrich Court Armoury, vol. i. pl. 47, fig. 8.

The Fens of Cambridgeshire have preserved some of the most remarkable relics, both of stone and of bronze, the latter, for the most part, valuable on account of their perfect condition. In the Museum of the Cambridge Antiquarian Society there is a specimen of the taper blade found in Quy Fen in 1854: the rivet-holes have been broken away, the broad end where they occur is smaller in proportion than in some other instances, and more rounded off. In the same collection, two other like blades may be seen, one of them found at Mildenhall, on the borders of Suffolk and Cambridgeshire, the other, presented by the Rev. Canon Venables, was found at Cookham, Berks, in the bed of the Thames.

In the Museum of the Bath Institution there is a specimen obtained near Midsomer Norton, Somerset; it has two rivets, and measures $14\frac{7}{8}$ inches in length. It was found about 50 yards from the Foss Way.

The bronze relics of this fashion have, however, occurred in most parts of England. Two small specimens, found in Lincolnshire, are now in the Museum at Alnwick Castle. I may notice also one in possession of the late Rev. Hamilton Gray, that he brought to the Museum at one of our Annual Meetings. It was a long blade, with two rivets, and had been brought to light near Doncaster. Another, found at Fisherton Anger near Salisbury, was contributed to our Special Exhibition of Bronze Antiquities, in 1861, by Mr. E. T. Stevens, to whose exertions in the arrangement of the Blackmore Museum in that city archæologists are so greatly indebted. It measures $14\frac{3}{4}$ inches in length.[2] On the same occasion, a specimen dredged up from the bed of the Thames near Erith was exhibited by Mr. Fortnum, F.S.A.; a bronze sword of the usual "leaf-shaped" type and a large socketed celt were obtained with it. This blade measures $16\frac{1}{2}$ inches in length.[3]

In the Tower Armoury one of these blade-weapons is to be seen; it has one of the rivets perfect, and measures 18 inches in length. There are two, of medium size, each with two rivet-holes, that claim notice as having been

[2] Arch. Journ. vol. xviii. p. 160.

[3] Ibid. p. 158. The celt above noticed was a very choice specimen; it has on each side five raised ribs terminating in small knobs like nail-heads. Compare one found in Derbyshire, figured in the Catalogue of Mr. Bateman's Museum at Youlgrave, p. 74.

accompanied by celts, a bronze ring, and other relics, found in the bed of the Thames between Hampton Court and Kingston. They were in possession of the late Dr. Roots, F.S.A., who was of opinion that the spot may have been that where Cæsar crossed the river in pursuit of Cassivelaunus, B.C. 54.[4] The curious antiquities collected by Dr. Roots were presented by his son to the Society of Antiquaries in 1860. A descriptive list is given in their Proceedings.

It has been remarked that these blade-weapons are comparatively common in Ireland, and numerous examples, varying much in their dimensions, have been laid before the Institute, especially from the extensive collection of Irish antiquities formed by our obliging friend, Mr. Brackstone. Mr. Franks has figured two good Irish examples in the Horæ Ferales.[5] One of these, measuring 18 inches in length, is in the British Museum; the other, found in the County Tipperary, was in the collection of the late Dr. Petrie; it measures $21\frac{3}{4}$ inches in length, and claims special attention, as having its bronze handle. The blade was attached by four rivets, and has only a slight central rib. The handle resembles those that often occur on the Continent, and occasionally in Ireland, attached to short blades of broader proportions, usually designated daggers; the end is, however, now open, like a socket, as Sir W. Wilde supposes, to receive a bone stud. It has been figured in his Catalogue of the Museum of the Royal Irish Academy; several varieties of the taper blades are there also given, under the name of "long narrow rapier swords." One remarkable example measures not less than 19 inches in length by $2\frac{1}{2}$ inches wide across the handle-plate, in which are two notches for catching the rivets. Sir William describes the weapons of this type as "tapering from the heft to the point, with a thick central ridge, no large handle-plate, but, in lieu thereof, a thin sudden expansion of the blade, which was attached to a cast-metal handle, probably formed of one piece, and to which it was affixed by two or more strong rivets burred over it. In many instances the handle-plate was only notched for the passage of the rivets, and in some it was

[4] Archæologia, vol. xxx. p. 490; Proceedings Soc. Ant., vol. i., second series, p. 83. Some of the relics found by the ballast heavers in 1843 at this place have been figured by Mr. Jesse in one of his interesting volumes of "Gleanings in Natural History," p. 271; edit. 1832. The blade above noticed is there represented.

[5] Horæ Ferales, pl. vii. figs. 15, 23, p. 155.

both notched and perforated."[6] Occasionally the outline of the blade seems to approach the leaf form, instead of the straight tapering type mostly to be noticed in the examples before enumerated. The most perfect example hitherto known was in possession of Lady Staples, and was found in a bog at Lissane, county of Derry; it measures 30¼ inches in length, 2¼ inches across the handle-plate, and five-eighths across the centre of the blade; the mid-rib is of unusual strength. There were two rivets only. The proportions and great length of this weapon are highly remarkable. But Sir William points out a fragment of a rapier in the Museum at Dublin, supposed to have measured, when perfect, not less than 40 inches in length. It had been figured by Col. Vallancey.[7] It is most difficult to comprehend how a slender blade of such excessive length could be made available by means apparently so ill adapted to its purpose, as attachment to the haft merely by two rivets passing through the thin handle-plate at the very margin of its extremity;—the strain on such a hefting must have been enormous.

There seems to be nothing to guide us in regard to the special use to which this kind of blade was destined. The absence of any normal type of length is perplexing; these relics seem to merge gradually from the rapier of almost unmanageable length to the short weapon for close combat, and then pass into the most diminutive dirk or stiletto. It is difficult, as Sir W. Wilde has truly remarked, to draw any precise line of demarcation between the sword and the dagger. Still more difficult is it to comprehend that, with the single exception before noticed, the weapon formerly belonging to Dr. Petrie, no specimen of the handle of the rapier blades, whatever may have been its material, should have occurred.[8] Some of these haftings must have been nearly an inch in thickness where crossed by the rivets. It is, however, asserted on the authority of experts in such matters, that the form of the hammered-out burrs or ends of the massive rivets shows that they must have been produced over metal apertures, and not on any substance less resistible than

[6] Wilde, Catal. Mus. R. I. A., pp. 447, 448.

[7] Collectanea, vol. iv. pl. ii. fig. 10. Wilde, *ut supra*, p. 473; see also p. 442, where the specimen belonging to Sir Thomas Staples is figured.

[8] See Sir W. R. Wilde's remarks on this perplexing question, Catalogue, *ut*

metal. At the same time we are wholly at a loss to explain why, at least in some instances, the handle and the blade might not have been advantageously cast in one piece, especially in times when the art of the founder in metal was unquestionably practised with such remarkable skill.

These notices of a remarkable type of weapon, the "taper rapier blade" of the distinguished archæologist in Ireland, whose valuable work throws so much light on our earlier antiquities, would be incomplete without reference to some of the examples that have occurred on the Continent.

During my recent visit to the International Exhibition at Paris, I visited the Museum of Antiquities lately formed by the Emperor at the Palace of St. Germain, and I examined with considerable interest the instructive collection there deposited. I found the following examples of this comparatively rare type—there designated "Lames de Poignard":—

1. From Auxonne, in the department of the Côte d'Or; it measures 18½ in. in length, and has two rivets still in their original position.

2. Found in the department of the Somme; length about 15 in., with two rivets entire.

3. Found in the department of the Seine and Oise. This is a short example with four rivet-holes; this blade had a slight approach to the leaf shape about the middle.

4. Seine and Oise. A blade 15 in. long, regularly tapering, two rivet-holes; the midrib well fashioned. Width of the blade at the hafting edge 1½ in., across the angles or shoulders 1¾ in.; the blade measures about 1 in. in width, and then tapers gradually towards the point.

Bronze weapons of this type have been found in other Continental countries, but they appear to be rare. Examples are given by Lindenschmit, the learned Conservator of the Museum at Mayence, in his instructive selection of antiquities from numerous public and private collections in Germany.[9] Amongst the bronze swords (Schwerter) he gives a good example of the taper blade from the Royal Museum at Munich. The place of discovery has not been recorded.

supra, p. 459. The various types of handles of the leaf-shaped swords, and also of daggers, claim especial observation. Many examples may be seen in the Horæ Ferales, plates vii. viii., and in Lindenschmit's Alterthümer.

[9] Die Alterthümer unserer heidnischen Vorzeit; Mainz, 1858, 4to. The first volume of this useful work, which is published in numbers at a very moderate price, has been completed. See Heft iii.; Weapons of the Bronze Period, taf. 3 figs. 10, 11, 14, 15.

It measures about 23¼ in. in length; it has a single central ridge, and four rivets close to the edge of the broad or hafting end. Another, of somewhat smaller dimensions, may be seen in the Museum at Mayence; it is described as found amongst remains of Roman buildings at Weisenau, near that city; the length of this blade, which has a central ridge and two rivets only, is 18¾ in. A third, figured in the same plate, appears to be perfectly flat without any central ridge; it had four rivets, of which one is lost; the length is a little more than 18 in. It was found near Baireuth, in Bavaria. A fragment of a similar blade is likewise figured, from the collection of Baron Estorff; the place of discovery unknown. Two examples of somewhat different type, of smaller dimensions, and with some lines of engraved ornament on the lower parts of their blades, are likewise given.

Before bringing to a close these notices suggested by a recent discovery in Devon, I proceed to mention certain objects of bronze of various types that have been brought to light in the same county.

About twenty years since, eight celts of bronze were found at Plumley, in the parish of Bovey Tracey, near the spot where the moulds before noticed were discovered, but about three miles higher up the valley of the Teign. Four of these were placed carefully under a block of granite, the others lay in the adjacent soil.[1] Near Plumley there were formerly some stone circles in good preservation, probably the vestiges of a British village. The proprietor destroyed these curious remains in order to obtain material for the repair of the roads.

Polwhele mentions celts, mostly of brass, found singly in the parishes of Chudleigh, Ilsington, and Buckfastleigh; also one brought to light north of Barnstaple. The Rev. Mr. Carrington found several celts in cairns between Bridford and Christow; these, however, were possibly relics of stone, not of bronze. Mr. G. Drake, of Ipplepen, had a celt described as of copper, found 1820 in a wood on his property in that parish.[2]

I may here also record the discovery, a few years since, of a well-preserved looped palstave on the property of Edward Drewe, Esq., of the Grange, Broadhembury. It remains in his possession. The site where it was found, as I believe, at

[1] Arch. Journ. vol. ix. p. 186.
[2] Lysons, Magna Brit., Hist. of Devon; vol. i. p. cccx.

Dulford, is situated about two miles from the great entrenched fortress known as Hembury Fort, before mentioned, where ancient relics of various periods have been brought to light. Three palstaves, found in Devon, are in the possession of Mr. Wilcocks, of Duryard.

Two spear-heads, in excellent preservation, beautiful examples of the "leaf-shaped" type, were found within an ancient entrenchment near a ford of the River Exe, at Worth, in the parish of Washfield. They are now in the possession of Mr. Worth, of Worth. One of these spear-heads measures nearly 12¾ in. in length, the other 8¾ in. The blade of the first measures 2¼ in. in breadth. With these was found a short sword, length in its present state 14 in.; there are notches or damaged perforations for rivets at the hafting end, which is broken, so that the precise fashion cannot now be ascertained; possibly this relic may be portion of a leaf-shaped sword of the ordinary type, the handle-plate of which had suffered injury.[3] Similar short weapons, however, have occurred, deposited with swords of the well-known fashion, spear-heads, &c. The three objects found at Worth, and here figured (see woodcuts), were accompanied by an irregularly rounded flat plate of bronze, measuring in diameter about 5 in. by 5½ in., apparently hammered out, thickness about 18th of an inch.

In conclusion, I have to invite the attention of archæologists anew to certain bronze relics, of most remarkable character, found in Devon; their purpose has never been satisfactorily explained. I allude to the barbed spear-heads, the discovery of which was brought before the Institute by me in 1854, and related in this Journal.[4] They were found in decayed condition at a spot called "Bloody Pool," in the parish of South Brent, and on the verge of Dartmoor. The place is now a swampy hollow, but no longer a pool; no tradition has been found of any conflict that might explain the name assigned to it. With the spears, which were accidentally brought to light in digging, there were four pieces of tube, probably ferrules that may have been affixed to the lower extremities of the shafts. The strong rivets by which the spear-heads had been affixed remain perfect (see woodcuts). The length of the spear-heads, as nearly as

[3] Compare a similar blade found in the Thames near Kingston, figured in this Journal, vol. v. p. 327.

[4] Arch. Journ., vol. xii. p. 84.

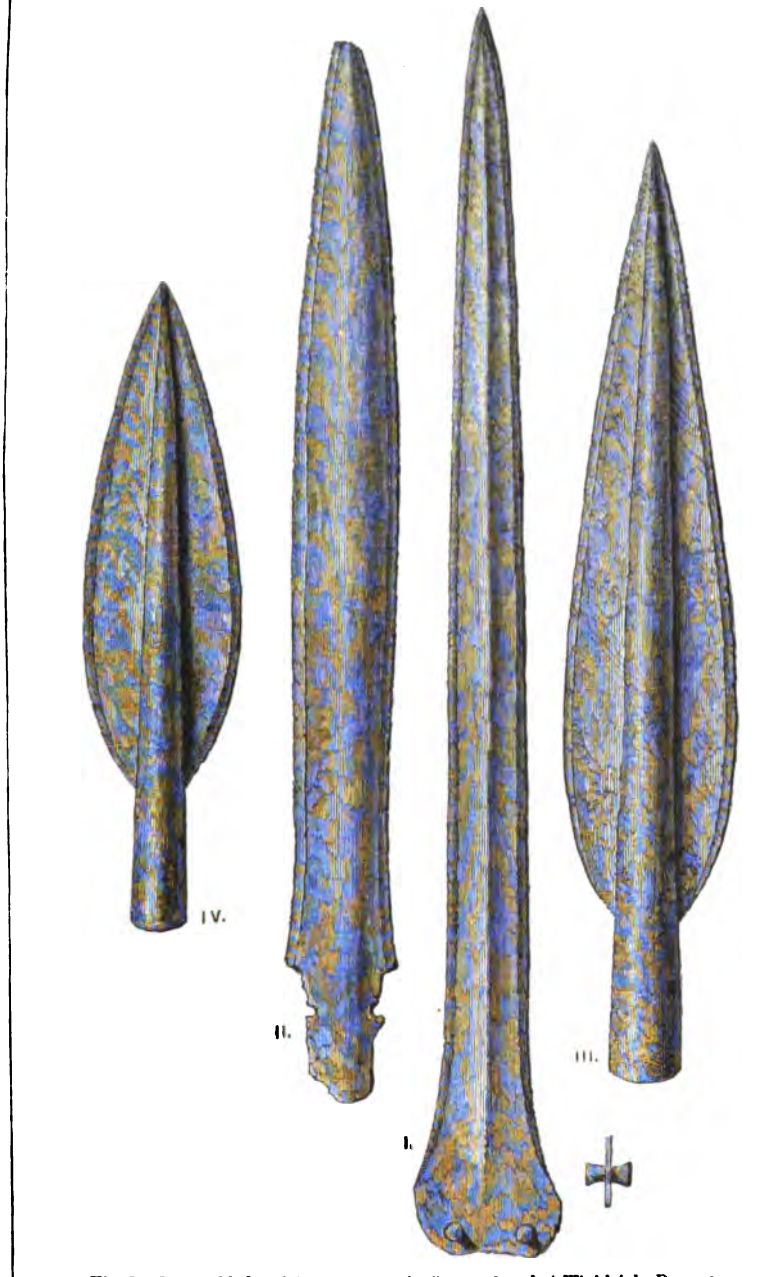


Fig. 1.—Bronze blade, of the "taper rapier" type, found at Winkleigh, Devon; length 17 inches (see p. 113).

Fig. II.—Sword found at Worth; length, 14 inches. Figs. III. IV., Spear-heads, found ibid.

could be ascertained, had been 14 in., the breadth, at the widest part, $2\frac{3}{4}$ in. The length of the tubes is about 7 in., diameter 7-10ths.; they taper slightly towards the extremity, which is closed like the ferrule of a walking-cane. The spear-heads, with one exception, were barbed, and bear resemblance to that found in the Severn near Worcester, and supposed to have been a fishing-spear.[5] The blade, in that example, is shorter and of greater breadth; in both the socket is very short. All the spears found at Bloody Pool were broken into three pieces; within the blades there is a kind of core, apparently not metallic; none was seen in the ferrules.

Bronze Spear-head and Ferrule found at South Brent, Devon. Length of the spear about 14 inches.

Another specimen of the barbed spear-head has been found at Pendoylan, Glamorganshire, in 1856; it was deeply embedded in sandy gravel under peaty soil, near a brook. Length, including a short socket pierced for a rivet, 7 in., breadth across the barbs $3\frac{1}{8}$ in.[6] A similar relic, measuring in length about $10\frac{1}{2}$ in., was found in peat at Speen, Berkshire.[7] Some imperfect specimens have been found more recently in the Thames, and another, in Plaistow Marshes, Essex, length $10\frac{1}{2}$ in.[8] Bronze rivets seem peculiar to this kind of spear; the ordinary leaf-shaped spear-head

[5] Arch. Journ., vol. ii. p. 187; Allies' Antiq. of Worcestershire, 2nd edit. p. 30. Horæ Ferales, p. 154.

[6] The socket is peculiar, being oval, pierced for a rivet. This spear was exhibited by Mr. J. E. Rolls in the series specially illustrative of Antiquities of Bronze, and formed by the Institute in 1861. Arch. Journ. xiv. 357; vol. xviii. p. 161.

[7] Figured Journ. Brit. Arch. Assoc. vol. xvi., 1860, p. 322.

[8] Proceedings Soc. Ant. N. S. vol. i. p. 125; vol. iii. p. 166.

appears to have been affixed by a rivet of wood, one exception only being known to Mr. Franks.

The slight bronze ferrules, such as accompanied the deposit at South Brent, have occurred in a few other instances. I may cite especially the hoard of celts, spearheads, and palstaves disinterred at Nettleham, near Lincoln, in 1860, as related by Mr. Arthur Trollope. A bronze tube, closed at its smaller end, was found with them; length 8½ in., diameter, at top, 5-8ths, at the bottom ½ an inch. It is figured, and also several of the other relics, in this Journal.[9] A similar ferrule, measuring 9⅜ in. in length, with a rivet-hole 3¼ in. from the upper end, was found in 1860, at Nottingham, with spears, celts, and broken weapons.[1] In the large deposit of bronze weapons, &c., found at Guilsfield, Montgomeryshire, in 1862, not less than twelve long tapering ferrules of the like description were found, six of them perfect, measuring from 10 to 16 in., they were supposed to have been affixed to the shafts of spears; each is drilled with a diminutive rivet-hole. These tubes had been cast hollow in a mould, and are very thin, especially at the lower end.[2] The intention of these slender tubes, which, in every instance, as I believe, are closed at their smaller or lower extremities, has not been satisfactorily explained. In regard to the broad barbed spears, of which no counterpart has been found, so far as I am aware, amongst Continental relics of bronze, it is remarkable as connected with their supposed use in spearing fish, that they have invariably occurred in or near streams, or in places where pools may formerly have existed.

Whilst this memoir was in the press, three taper blades have been obtained, with bronze celts and other relics found in Wales, for the British Museum. They had been found on Cwm Moeh, a mountain in the parish of Maentwrog, Merionethshire, and had been brought before the Society of Antiquaries, in 1809, by Mr. John Lloyd of Cefnfaes. These blades, which measure 15⅜ in., 14 in., and 12½ in. respectively, are figured, Archæologia, vol. xvi. pl. lxx. We are indebted to the obliging curator of the Museum, Soc. Antiqu. Scot., Mr. M'Culloch, for notices of specimens there preserved; one from Dumfriesshire may have measured, when perfect, about 13 in. in length; another, found at Buttergash, Perthshire, close to the Roman Camp at Ardoch, 12½ in.; each had two rivets.

[9] Vol. xviii. p. 160.

[1] Figured Proceedings Soc. Antiqu., vol. ii. second series, p. 250.

[2] Proc. Soc. Ant., vol. ii. second series, p. 250, Archæologia Cambrensis, vol. x., third series, pp. 214, 221, where one of these tubes is figured. Amongst the numerous relics found in 1859 at Pant-y-Maen, Cardiganshire, and there likewise figured, there were ferrules of a different type, of short dimensions, and dilated at their closed extremities. In one of these part of the wooden shaft was to be seen.

ROOVESMORE FORT.- PARISH OF AGLISH CO. CORK.

SLAB NEAR ROOVESBEG.

FIG. 7.

PLAN OF THE FORT.

FIG. I.

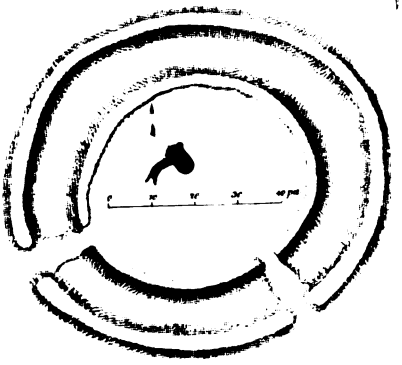


FIG. 5.

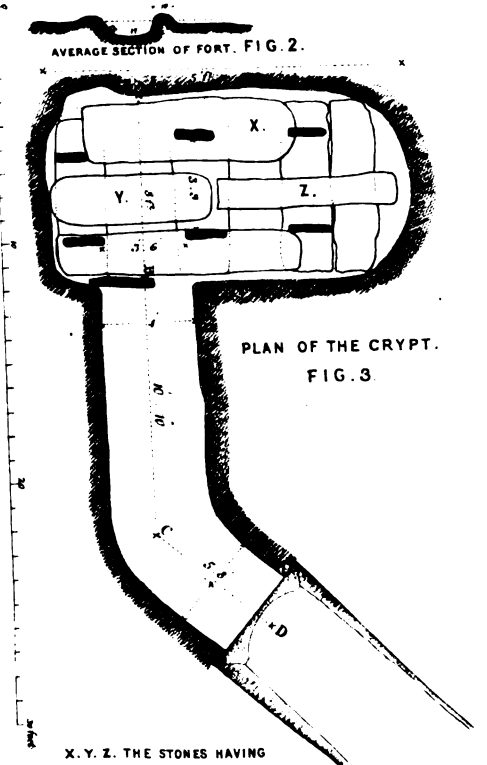
DALLAUNS NEAR ROOVESBEG.

FIG. 6.

SECTION ON THE LINE A. B. C. D.

FIG. 4.

AVERAGE SECTION OF FORT. FIG. 2.



X. Y. Z. THE STONES HAVING OGHAM INSCRIPTIONS ON THEM.

ROOVESMORE FORT, AND STONES INSCRIBED WITH OGHAMS, IN THE PARISH OF AGLISH, COUNTY CORK.

By Colonel AUGUSTUS LANE FOX, F.S.A.

THE Fort or Rath in which these stones were found (figs. 1 and 2, pl. 1) is situated on rising ground upon the farm of Mr. Good, about half way between Cork and Macroom, and to the south of the river Lee.

It is of the form which is most usual in that part of Ireland, an irregular circle of about 130 ft. in diameter, measured from the crest of the innermost parapet; beyond this there is a ditch of about 17 ft. in breadth, and beyond the ditch another parapet of 10 ft. base and 3 ft. high, the ditch being, as is frequently the case thereabouts, between the two parapets. The inner parapet is now nearly obliterated, but it must have originally commanded the outer one, which is better preserved. There are two entrances, one to the south-east, and the other to the south-west. The fort, if such it is, is well situated for defence, on the top of a gentle rise, and it is nowhere commanded from the outside.

The entrance to the crypt (figs. 3 and 4, pl. 1), of which nearly every rath in this neighbourhood possesses one or more, is nearly in the centre of the interior space. It is a small gallery cut in the natural soil, 4 ft. in width and 1 ft. 9 in. in height at the entrance, increasing to 2 ft. 2 in. near the chamber. The descent to the gallery is by a little ramp from the surface, but there is no proof that this was the original entrance; it may be a continuation of the gallery that has fallen in. For about 5 ft. the gallery runs northwards, and then makes a bend to the right, continuing in that direction for about 10 ft. further, where the opening into the chamber is partly closed by an upright slab: passing over this slab, the chamber is entered on its south-west side near the west corner. It appears to have been originally of quadrangular form, about 15 ft. in length by

8 ft. in width, but its south-eastern end had fallen in and could not be accurately measured. Six upright slabs had been placed as jambs, longitudinally, in two lines, at about 2 ft. from the sides of the chamber. Upon the tops of these, heavy slabs of unhewn stone were laid transversely, as lintels, and upon these again rested other longitudinal slabs of the same kind, placed side by side, the edges nearly touching, so as to form the roof. Upon examining these last with a candle from beneath, I found that the two stones (marked X Y, figs. 3 and 4, pl. 1) which lay contiguous to one another, had their edges scored with oghams. But the marks were only just perceptible, by the light of the candle, in the interstices between the stones; only the ends of the strokes were visible, and although they were clear enough for me to recognise them at once as oghams, they might very probably have escaped the notice of any one who had not been prepared, by seeing the crypt at the Gap of Dunlòe, near Killarney, to meet with an inscription of this kind on the roof of the chamber. But it was quite out of the question to attempt to read them in the position in which they were placed. The two stones touched in some places, and even where they did not touch, the further ends of the strokes were continued round the upper edges of the slabs, where they were lost to the eye or buried in the superincumbent soil. It was evident that the builders had never intended they should be deciphered by any one from the interior of the chamber. The smallest of the three stones (marked Z, fig. 3, pl. 1) could not be seen from below, and was only discovered whilst excavating the other two.

The height of the chamber beneath the lintels was only 1 ft. 10 in. This is probably less than the original height, owing to a quantity of stones and rubbish that had accumulated upon the floor, but it could never have much exceeded 2 ft. The crypts in this part of the country vary from 2 to 5 ft. in height, but rarely exceed 4 ft. There was a glimpse of daylight from a rabbit-hole at the east end, where the earth had fallen in and destroyed the shape of the chamber. On the north side were the traces of another gallery, also destroyed, but probably communicating originally with a second chamber in that direction. The upper faces of the ogham stones were found, in excavating, to be 4 ft. beneath the surface of the ground.

One of the lintels was cracked in the centre, evidently from the weight above, and it appeared probable that in course of time the roof would fall in. This circumstance, coupled with the impossibility of reading the oghams as they were then placed, seemed to make it desirable, in the interests of archæology, that the stones should be removed before they were lost in the impending ruin of the building. In so doing, I received every assistance from the owner of the property, who had long desired to remove the rath as an impediment to his farm. But it was not without much persuasion that I induced any of the labourers to work in the place, owing to the superstitious dread the natives have of meddling with these localities. To this may be attributed their preservation in great quantities throughout the south, and indeed the whole of Ireland. It is generally believed that any interference with these raths will be attended with dire calamities from the vengeance of the fairies who inhabit them; and, as these evils are not confined to the perpetrator of the outrage, but extend to the neighbourhood in which it takes place, it not unfrequently happens that some event may occur which is construed into a fulfilment of such belief. As an instance of this credulity I may mention that, on one occasion, I was supposed to have caused the death of a calf in an adjoining farm, by creeping into one of these crypts. This was no idle story got up for the purpose of extorting money, but a genuine belief on the part of the neighbours; and I extracted it from the brother of the parish priest, to whom the rath belonged, and to whom the people had appealed to prevent my working there. I believe that owing to this circumstance, Roovesmore crypt had very rarely been entered by any of the inhabitants, and, as far as I could ascertain, none of them were aware of the existence of the ogham marks. It will be seen, therefore, that in removing the stones I had other matters to contend with besides the mere mechanical difficulty of raising them out of the ground, which was not inconsiderable, the largest weighing about a ton and a half, the other two about 6 cwt. and a ton, respectively. I at last succeeded, however, in getting them conveyed to Cork, and ultimately to London, where they have been deposited in the British Museum. I may mention that the Cork Steam Company, viewing them as monuments of general interest, very liberally offered to

take them to London free of cost. With respect to the origin of these remains, and the purpose for which they were constructed, like all pre-historic monuments, much must, of course, be left for conjecture. But in the absence of any material evidence on this point, it may perhaps serve to throw some light upon the subject, if it can be shown, with anything like certainty, that the oghams are of older date than the building of which they formed part.

Several circumstances appear to point to this conclusion. In the first place, it has been already stated that the writing was illegible from its position in the chamber. Not only were the inscriptions on the two larger stones partially concealed from view, but the smaller stone z lay with its ogham face upwards, covered with four feet of earth. It is highly improbable that, if the oghams were scored with the view of recording any circumstance connected with the building or its contents, they should have been buried in a position where they could never be seen.

But, further than this, there is evidence to show that in all probability they were originally standing stones, Menhirs, or, as they are called in Ireland, Dallauns. An examination of the stones will show (pl. 2), that on all three of them there is a blank space left at one of their extremities, and that the ogham lines are principally distributed on the other ends. Upon the smallest stone, z, the lines have probably been carried all round what I consider the top end of the stone, and down the other side, leaving, as on the other two, a sufficient unscored space at the bottom to be inserted in the ground. Now it is well known that ogham was almost invariably read from the bottom upwards; it might therefore be expected that the proper way of reading these inscriptions would be found to be from the blank towards the other end. I have not sufficient knowledge of the Irish language to enable me to make anything of the two smaller stones. It is to be hoped that in their present accessible position, they may draw the attention of some person more learned than myself in such matters. The marks upon the smallest are exceedingly well defined, and they are sufficiently clear on both to make the value of the letters intelligible to any one who is able to distribute them in words. Upon the larger stone x the inscription read from the blank end upwards is plain enough; it is, according to the

THE ROOVESMORE OGHAMS.

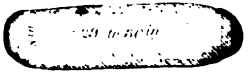


FIG. 1.

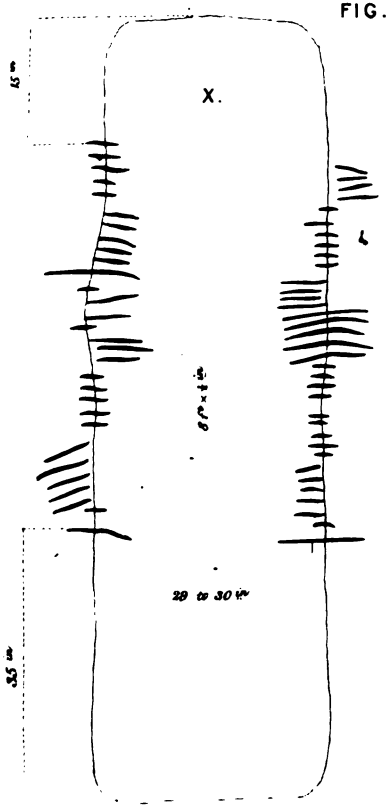


FIG. 2.

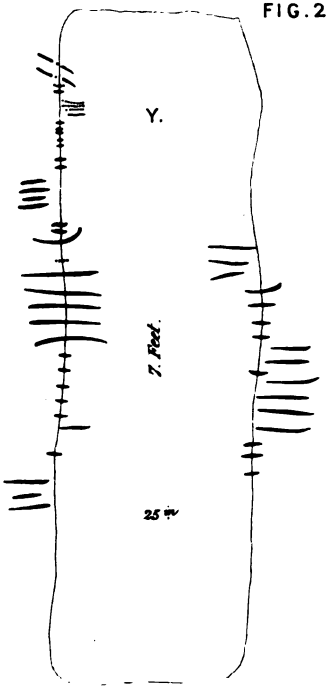
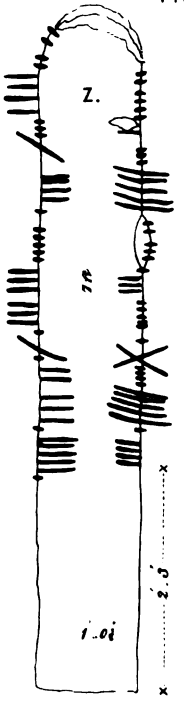
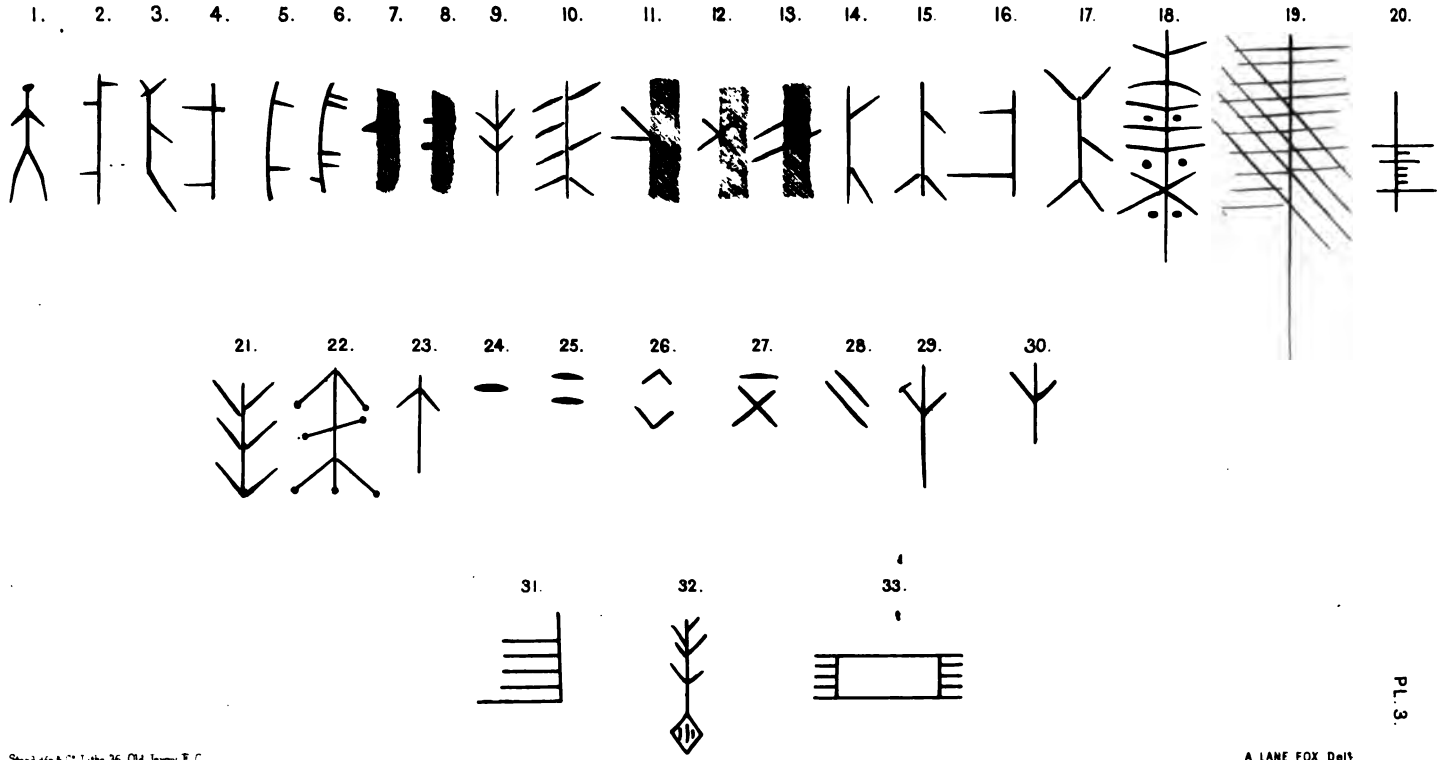


FIG. 3.



PL. 2.



PL. 3.

Standidge & Co., Litho. 36, Old Jewry, E.C.

A. LANE FOX Del.

recognised Ogham scale, on one side,—MAQIFALAMNI, and on the other, read the same way, MAQIERCIAS. Maqi is a well known ogham version of Macc, son of, and is found upon the majority of ogham inscriptions in Ireland. The inscription therefore reads,—son of FALAMNI son of ERCIAS. Here, then, we have clearly the right way of reading it. The blank end was the bottom, and could have been left for no other object than to be inserted in the ground.

There can be little doubt that when the other inscriptions are deciphered,[1] they will be found to read in the same direction. A large chip has very possibly obliterated a portion of the inscription upon the top of the smallest stone; but the fact that the lines continue round a portion of the bend, up to the point where the chip commences, and recommence again upon the other side of the chip, is alone sufficient to prove that this was the top of the stone, and that in all probability the writing was originally continued all round the top, and down the other side, in accordance with the frequently prevailing custom of ogham inscriptions elsewhere. The marks upon the stone X are much jagged and time-worn, but Y, being of harder stone, shows evident traces of an edged tool. The stones are of a red slaty material, or rag-stone. Similar blocks to those of X and Y are frequently found upon the rocky hill sides in the surrounding country, which geologists inform me show evidence of glacier action.

There appears to be very little reason to doubt, therefore, that these were originally standing stones, serving to mark a grave, a boundary, or to commemorate some remarkable event; and that at some period subsequent to their construction they have been employed by the builders of the crypt as a handy material for their purpose, and inserted in the roof of the chamber without regard to the object for which they were scored. If so, it would imply either that

[1] According to the Ogham scale, the letters appear to be as follows. Upon the stone Y (fig. 2, pl. 2.):—upon the left side, TABI RAMOCOI, the remainder very doubtful,—upon the right side, USALET.—Upon the smallest stone Z (fig. 3, pl. 2);—upon the left side, ANAFLAMATTIA SMUCE;—upon the right side, if read from the chip at the top, downwards, OE(L?)URIAFIA(AE)ERAS,—but if read from the bottom upwards the letters on this side would be CARE(AE)AITAIRU(D?)EO. As the slabs now stand at the British Museum, the stone X is inverted, and the left side in pl. 2 is on the right. It is of course quite immaterial which way they are placed.

a considerable period elapsed between the scoring of the oghams and the construction of the crypt, during which time the inhabitants had either outgrown or lost sight of the superstitions of a prior age, a circumstance which the still existing fetishism of the country would hardly warrant us in assuming; or, that it may have been constructed by an intruding race, which had no knowledge or reverence for the monuments of their predecessors.

This latter view might appear to have some support in the very wide-spread tradition of the country, that the raths were erected by the Danes, were it not for the enormous numbers in which they are found dispersed over the island, rendering it unlikely that they should have been constructed by that race during their limited occupation of the country.

Another circumstance which leads to the belief that these slabs may originally have been dallauns, is the fact that such monuments are found in unusual numbers in the immediate vicinity of the rath. At about 300 yards to the west are five dallauns in line, of which one is still erect. To the south-west, at about 100 yards' distance, are two large slabs turned on end; and 100 yards further south, are four stones in line, the longest of which, 15 feet in length, has fallen; two others are short stones, perhaps broken; and a fourth, 9 feet high, is erect. Further still to the south-west, and at about 100 yards from another smaller rath called Roovesbeg, is a dallaun, the front and sides of which are given in figs. 5, 6, pl. 1. This is 5 feet high, and has five distinct ogham marks on its east side; it is illegible from the "Fleasq," or central stem line, the corner edge having probably been broken off. Upon the broad face of this stone, 3 ft. 10 in. in width, and facing south, are seven shallow, cup-shaped depressions, and upon another slab, which lies flat, at a distance of 9 paces to the north-west (fig. 7), I counted as many as thirty of these shallow depressions, some of which were so much weather-worn as to be scarcely discernible. The association of oghams with these circular marks is worthy of notice, and, if they may be assumed to have been cut at the same time, would seem to imply a very early date.

The occurrence of graven stones in subterraneous chambers, with evidence of their having been carved before

placing them in the buildings, has occasionally been noticed elsewhere. At Gavr-Innes and Loc-Maria-ker, in Brittany,[2] at New Grange also, in the North of Ireland, the sculptures are described as having evidently been cut before building them into the earthworks in which they are found. But what is more to our present purpose, is the cave at the Gap of Dunloe, near Killarney. Here the ogham marks upon the lintels in the roof are continued round the ends of the stones which are inserted into the sides of the cave. I found that it was only by scooping into the earth that I was able to disentomb some of the marks, and a considerable portion of them can never be reached without destroying the building. In this chamber we have a precisely analogous construction to that at Roovesmore, furnishing also additional evidence in favour of the hypothesis that the ogham writing is more ancient than the crypts; or at any rate, than those particular crypts in which they are found. The Dunloe crypt, however, differs, in being unconnected with any rath, or entrenchment, of which there are any visible traces. Another instance of the appropriation of ogham stones for building purposes; serving to fix the date with greater approach to accuracy than in the preceding cases, occurs at Ardmore, in the county of Waterford, where an ogham stone was found built in amongst the masonry of St. Declan's Oratory, in such a manner that the greater part of the inscription was concealed from view; the stone having been used as an ordinary building-stone. As St. Declan is supposed to have been a contemporary of St. Patrick, and to have been buried in that building, this must be one of the earliest structures of the Christian era. From information given me on the spot by the owner of the property, there can be no doubt of the stone having been actually found in the spot indicated, which circumstance appears to be in itself sufficient to fix the origin of ogham in pre-Christian times.

The fact that Latin inscriptions have been found in oghams proves unquestionably that such mode of writing must have been used up to a comparatively recent date. But as inscriptions are also much more frequently found in Irish, whilst others appear not to be amenable to either Latin or Irish interpretations, may not the ogham have been derived, as

[2] Early Races of Scotland, by Lieut.-Col. Forbes Leslie, vol. ii. p. 86.

its extremely simple construction would appear to indicate, from some very primitive method of recording ideas, and have subsequently undergone modifications, and been adapted in later times to a regular phonetic alphabet, in which the Irish and Latin languages could be expressed? The occurrence of bilingual or rather biliteral inscriptions in four places in Wales,[3] in which the same words are written both in oghams and Roman letters, shows that in all probability they must have been intended to be read by two distinct classes of persons, to one of whom the ogham character was familiar, whilst the Roman letters were unknown.

In many parts of the county of Cork I have met with incised marks upon dallauns and cromlechs, which, though resembling oghams, cannot be interpreted by the Ogham scale. One of these occurs on a dallaun called Clogheenmilcon near Coolowen, north of Cork. The marks are all horizontal, and appear, by the coincidence of their edges in a uniform vertical straight line, to be referable to an imaginary "fleasq," but they are quite illegible. Another of these stands in the entrance to a rath west of Blarney. Upon the top of Knockeencragh, west of Mallow, I found a dallaun, having traces of oghams that were unintelligible.

The late Mr. Windele of Cork, who devoted much of his time to the study of these subjects, possessed a number of specimens of ogham, collected from various parts of the country, some of which are now in my possession; yet, although no man was more familiar with what has been dignified by the name of "Ogham literature," there were several specimens of undoubted oghams in his collection which he could never convert into Irish or any other language. May not these be referred to a period anterior to that in which the ogham was systematised into the scale by which the later inscriptions have been interpreted? At Logie in the Garioch, and at Golspie in Sutherland, are two ogham inscriptions which appear to differ from the Irish scale.[4]

[3] The Sagranus stone at St. Dogmael's Abbey, near Cardigan; the stones at Llanfechan, Cardiganshire, at Trallong, Brecknockshire, and at Llanarth, Cardiganshire, Arch. Camb., vol. vi. third series, p. 128; vol. vii. p. 43; vol. viii. p. 52; and vol. ix. p. 262. See also Proceedings, Kilkenny and S.E. of Ireland Arch. Soc., vol. iii. part 2, p. 229–303; vol. iv. p. 206. It is remarkable that the name Sagranus, found on the first of these examples, occurs likewise on the biliteral slab obtained at Fardel, Devon, now in the British Museum. It is figured in Arch. Journal, vol. xviii. p. 176.

[4] Figured by Mr. Stuart in the Sculptured Stones of Scotland, first series,

It has been held by some that ogham is a contrivance of post-Christian origin, and that the separation of the vowels from the consonants by distinct classes of marks, furnishes internal proof of its having been arranged by persons possessing some grammatical knowledge. Others, on the contrary, deduce from ancient Irish manuscripts, and from tradition, that it was introduced into Ireland by the Tuatha de Dannan about thirteen centuries before the birth of Christ.[5]

I am far from possessing any information by which I can hope to throw light upon this disputed question, for the proper consideration of which a knowledge of the Irish language is of course essential. I venture, however, to think it may prove interesting in connection with this subject, with the view of showing how ogham might have arisen spontaneously from the rude hieroglyphics of a barbarous people, and subsequently have undergone development or rearrangement, to compare with the unintelligible ogham marks above mentioned, some of the figures by which the Esquimaux mark their bone arrowheads, spoons, knives, and other property.

These marks present a very curious analogy to ogham in many ways. They consist of short strokes, cut right and left of a central stem or "fleasq," which, as in ogham, is either represented by a corner edge of the arrowhead, or is cut in the face of the bone. Nos. 1 to 19, pl. 3, are from specimens in my own or in the Christy collection recently bequeathed to the British Museum. No. 1 is clearly intended to represent a man, cut in straight lines, as a child would draw it. Nos. 2 to 6 might possibly be animals. No. 18 a tree. Nos. 7 to 17 can hardly represent anything in nature, and might be taken for isolated examples of ogham letters. No. 19, on the handle of a knife in the Christy collection, is a very close approximation indeed to ogham. Not only is the "fleasq" distinctly cut down the

1856, pl. iii., and xxxiv. In the Logie example the oghams are cut on a circle that here takes the place of the Fleasq. See also pl. i. where a slab with oghams is figured, that exists at Newton in the Garioch. The Logie and Golspie oghams are noticed also in a memoir on Cryptic Inscriptions on the Cross at Hackness, in Yorkshire, by the Rev. D. H. Haigh, Kilkenny Archæological Society's Journal, vol. ii. p. 186.

[5] See the learned remarks by Dr. Graves (now Bishop of Limerick), who has long had in preparation an elaborate treatise on oghams; his account is given by Sir W. R. Wilde in the Catalogue of the Antiquities in the Royal Irish Academy, Stone, p. 136. Some notices may also be found in this Journal, vol. xviii. p. 180, where the Ogham scale or alphabet is given.

length of the handle, but there is not a single stroke in it that might not be referred to the ogham scale; and had this knife been discovered in Ireland, it would undoubtedly have been supposed to express the letters DAIO or DMRG, with an ST cut across the other characters. No. 20 is from a small Esquimaux implement in the British Museum. It would represent in ogham the letters MFMBM, and as engravings of dogs and deer are unmistakeably depicted on the same implement, it is impossible to confound these rectilineal figures with conventional pictographic representations of any kind. They can be nothing else but scorings, serving to record either figures or words.

That such scorings do exist amongst the Esquimaux seems not improbable. Although it has been generally believed by most Arctic voyagers that the Esquimaux is an unwritten language, Sir Edward Belcher[6] inclines to the opinion that they are not without the means of recording events, and that the use of "notched sticks" and "working of the fingers" has "a deeper signification than mere numerals." Speaking of the Kuskutchewak, the most western of the tribes of Prince William's Sound, Sir John Richardson[7] says that every hunter preserves some remembrance of each reindeer that he kills by a mark on his bow. The Esquimaux are known to take the same pride in their arrows that an artillery officer does in his cannon, and they hand them down from generation to generation with the history of their performances attached to them.[8] Captain Hall also speaks of mysterious signs, consisting of particolored patches sewn on to sealskins, and hung up near the dwelling of the Angeko for the information of *strange* Innuit travellers, and "to direct them what to do." There appears, therefore, grounds for supposing that these people may eventually be found to be in possession of some code of signals which are received generally among the Esquimaux race, though possibly kept secret by their "Angekos" or priests, respecting whom but little reliable information has been as yet obtained.

It is not here pretended there is any evidence which might

[6] Sir Edward Belcher on Works of Art by the Esquimaux, Transactions of the Ethnological Society, vol. i. p. 135, new series.

[7] Sir John Richardson, Arctic Searching Expedition, vol. i. p. 368.

[8] Paper on the Esquimaux, by Dr. Sutherland. Journal of the Ethnological Society, vol. iv. p. 205.

lead us to suppose that the "Beithluisnion" of the Irish ogham is likely to be found a living alphabet amongst the Esquimaux, or even that any actual connection may be found to exist between these two obscure modes of writing names and short sentences, but simply a strong analogy of method and form; the Esquimaux representing the art of writing in so extremely infantile a stage as to be incapable of comparison with anything but the scorings of an uneducated child, and yet possessing those characteristics which in Ireland and the west of England might, under perhaps Phœnician influence, have developed into the ogham character, and serving to show how, in tracing out the origin of any art, the obsolete customs of one country may find their illustration in those of another whose inhabitants are in the same stage of progress and civilisation.

Figs. 21 and 22 are representations of incised marks found by Dr. Hunt, director of the Anthropological Society, upon two slabs in the island of Bressay, in conjunction with wooden coffins, but not necessarily connected with the coffins in point of date. They have been variously, and, as I venture to think, unsatisfactorily interpreted as combined runes or monograms; but Professor Stephens of Copenhagen, the highest authority on the subject, is unable to identify them as Runes, and I believe that Dr. Hunt himself does not consider them to be Runes.[9] Although they cannot be interpreted by the ogham scale, the stem line gives them more the appearance of ogham than of runic characters; an ogham inscription, moreover, has been found in the island of Bressay.[1] It will however at once be seen that their affinity to the Esquimaux arrow-marks is far closer than to either ogham or runic letters.

Viewing the resemblance of the Picts' houses and tumuli which abound in this neighbourhood and throughout Ireland and the west of Scotland to the yourt and igloo of the Esquimaux, and many other points of resemblance in the

[9] Memoirs of the Anthropological Society, vol. ii. p. 373.

[1] This remarkable sculptured headstone found in 1852 at the ruined church of Cullensbro, in Bressay, was first made known by the Rev. Z. Macaulay, at the Annual Meeting of the Archæological Institute at Newcastle. It has been published by Dr. Charlton, Archæologia Æliana, vol. iv. p. 150; in this Journal also, vol. xviii. p. 181; and in Mr. Stuart's Sculptured Stones of Scotland, plates xciv, xcv. At a meeting of the Institute in May, 1855, Dr. Graves, now Bishop of Limerick, gave an interpretation of the ogham inscriptions occurring on the two edges of the slab; one signifying—The Cross of Natdodd's (or Nordred's) daughter here;—the other—Benres of the sons of the Druid here.

implements of the two countries that might be noticed; and considering also the geographical position of these Bressay stones upon the confines of the ogham region, and inclining towards that of the Greenlander and Esquimaux; it seems not impossible that these inscriptions may eventually be found to establish some link of connection between them, an hypothesis rendered all the more probable by considering the very wide extent of territory over which the Esquimaux now ranges, extending from Greenland on the one hand to Behring Strait on the other, and their affinity to the Tchukchi and even to the Laplander of Europe and Asia. This view of the case is also confirmed by the discoveries which have recently been made in the French caves, tending, in the opinion of the explorers of those caves, to show that a race akin to the Esquimaux in their arts and implements, if not the Esquimaux race itself, did actually occupy Europe in conjunction with the reindeer, at a time anterior to that in which the ogham character must have originated in Great Britain and Ireland. Should it be hereafter discovered, as appears not unlikely, that scorings having an affinity to ogham are found on the primeval monuments of Brittany, it will of course tend greatly to strengthen this argument, by showing that it must have appertained to the whole of that aboriginal race, which was pressed by the great wave of eastern immigration into the north and west of Europe.

Much valuable information no doubt remains to be brought forward upon a subject, the study of which has hitherto been confined almost exclusively to the British isles. In the meantime there is not wanting in the ancient bow-marks which have been discovered in Europe, sufficient evidence to show that a similar method of scoring the owner's name to that above noticed was practised in ancient times. Figs 23 to 30 are from arrows discovered in Denmark in the Nydam Moss,[2] with others, having what are believed to be Runic characters upon them. Although they are no doubt much more recent than the deposits of the French caves, they are almost identical with these marks of the Esquimaux arrows. To go further east, the derivation of the Assyrian cuneiform character from the early Chaldean which has been traced by Mr. Rawlinson,[3] consisting of representations of the object to be

[2] Denmark in the Early Iron Age, by Conrad Engelhardt, pl. xiii.

[3] Rawlinson's Ancient Monarchies, vol. i. p. 81.

described by means of straight lines of nearly uniform thickness, of which figs. 31 to 33 are examples, shows by the resemblance of these letters to oghams, that a certain family likeness may exist in the written characters of nations widely removed from each other when traced to their origin. Of these, fig. 31 represents a hand drawn with five straight lines joined to a stem; fig. 33, a woman, or the double-tooth comb, the emblem of woman; and the connection of the derived cuneiform character expressing the same words, would never have been imagined, had it not been for the discovery of biliteral tablets containing the same inscriptions in both characters, so exactly resembling each other in general arrangement and outline as to make the identity of the inscriptions obvious.

These comparisons of course prove nothing, beyond the prevalence of like modes of procedure under similar conditions of life. They lead us, however, by the continuity they display in the development of improved forms, to expect that a corresponding gradual progress may be traced in all other systems of writing, which have been widely received as such. And they make it far more reasonable to suppose by analogy that oghams may be indigenous or of natural growth, and derived from some prior and less systematic method of scoring names, or from tallies, than to believe, without sufficient evidence, that a trick of the Middle Ages—a cipher based upon the Latin alphabet—should have been so widely accepted, as to leave its traces upon monuments in all parts of Ireland, in Devonshire, also in Wales, Scotland, and in the Shetland Isles.

It has been suggested to me that a short description of the raths in the south of Ireland would be interesting, in connection with the site where the remarkable ogham monuments that I have described were brought to light.

In speaking of these works, such as that at Roovesmore, as forts, I have only adopted the term in general use for them by the country people. But it is not by any means certain that the whole of them were constructed as defensive works, although, from their commanding positions, there can be very little doubt that this was the intention of the majority. Others, on the contrary, are situated in positions that could never have been occupied for such a purpose, even in the most primitive state of warfare.

That they were inhabited, appears to be satisfactorily proved by the remains of hut circles that are found in some of them, by their being almost invariably found in close proximity to a good spring, and by their being usually located in the most fertile spots upon the hill slopes and valleys; whilst the rocky and unproductive country to the west of Cork, and south of Kerry, is almost devoid of them.

Wherever they are found in the rocky parts of the country, their ramparts are formed of uncemented and rudely built-up masses of stone, and they then come under the denomination of "Cahir," the well-known Celtic word denoting a fortified place, and from which such towns as Caernarvon, Cherbourg, and many other ancient fortresses derive their names. The "Cahir" is thus distinguished from the "Rath" or "Lis," which is a work of the same form, but surrounded by an earthen bank and a ditch, of which class of intrenchment Roovesmore may be regarded as a typical example.

They vary from 30 to 100 and 200 ft. in diameter. The largest I know of, in the south of Ireland, called Lis-na-raha, has a diameter of 280 ft., with a ditch 12 ft. deep and 30 in width on the outside. They are invariably circular, but the circle is traced with sufficient irregularity to show that it was laid out by the eye, and not by measurement. They often consist of a single ditch, with a bank on both sides of it; a method of intrenching which, although it appears to be almost as advantageous for the attacking as for the defending party, does not at all preclude the possibility of their having been used as forts, as we find this kind of intrenchment frequently employed elsewhere in ancient works of an undoubted military character.

The interior space of the rath is almost invariably undermined by a set of chambers, called by the natives "pol-fa-talla," or "hole of a house," the entrance to which is usually by an opening so small as barely to admit the body of a man creeping upon the belly. These chambers vary in size, but average about 9 ft. in length by 3 to 4 in height, and the same in width. Similar narrow openings communicate onwards to other chambers, and sometimes these underground galleries diverge into two or more strings of chambers, occupying the whole interior space within the circuit of the

intrenchment. The main entrance is frequently in the ditch of the rath, and is not unusually the smallest.

When the nature of the ground admits of it, they are often excavated in the natural earth, and domed over, without any artificial support; but others are lined in the inside with undressed and uncemented stones, the sides converging towards the top, which is usually flagged over with large and heavy slabs of stone serving to roof the chamber, and at the same time, by their weight, to prevent the sides from falling in. At other times, though rarely, they are formed by upright jambs and lintels of unhewn stone, like the crypt at Roovesmore.

Querns have frequently been found in these underground chambers, showing that they must have belonged to an agricultural people.

To the West of Kerry, where the rocky nature of the ground precludes the possibility of burrowing, "cloghauns," or bee-hive shaped and elongated huts of exactly the same shape and size as the underground chambers, are built with stones upon the surface, and are often covered with turf.

I have found the raths to be more frequently situated upon the shoulders than upon the summits of the hills, being generally placed in positions in which the occupants could see into the valleys beneath, in which probably the flocks and the fields of the inhabitants were situated, near the springs; but I have not observed them to be arranged in threes, as some persons have supposed, nor could I ascertain that they are located, in any especial manner, in positions that are suitable for intercommunication by means of signals. They are so numerous as to be necessarily within sight of each other, and no doubt signals might have been communicated from one to another over a considerable tract of country. But motives of security would cause them frequently to occupy commanding positions, from which an extensive view of the surrounding country could be obtained. The hill forts of the South Downs of England are so situated that when, during the French war, it became necessary to establish signals between the sea coast and the interior, the sites of the ancient British forts were found to stand on the most convenient spots for the erection of beacons. But this affords no proof that those sites were originally selected by the ancient inhabitants for the purpose of internal commu-

nication. In those primitive and barbarous times we must be prepared rather to find evidence of the isolation of tribes, and of frequent intestine quarrels, in which each section of the community fortified itself against the attacks of its immediate neighbour, than of any extensive and combined system of national defence. In so far as my own observation in the south of Ireland enables me to judge, the selection of the sites for the raths appears to have been influenced chiefly by the fertility of the soil and by the water supply.

I have calculated from the Ordnance Map, in which every vestige of antiquity in the country has been carefully delineated, that in Munster alone there were, at the time of the survey, no less than 10,000 of these remarkable earthworks distributed throughout the country. Many have been since removed; and as the curious myths and superstitions with which they are associated in the minds of the country people, and which have so long preserved them from destruction, gradually die out, they are fast disappearing before the plough of the farmer, reminding us that the time for active exploration must be no longer delayed if the archæologist intends to derive from them the only evidence of their ancient inhabitants that the world is ever likely to receive.

As regards the probable date of these works, all that I have been able to ascertain respecting them tends to show, that however early they may have originated—and their construction would lead us to assign a very early period to some of them—they must in all probability have continued in use until comparatively recent times, for I have on two occasions found them to be associated with implements of iron; in my collection also there is an iron axe and part of the pointed ferrule of a lance, the former of which was derived from one of the underground chambers, and the latter was excavated from the centre of a rath in which it was found three feet from the surface, together with a quantity of ashes and fragments of burnt bones.

From the really very little reliable information that can be obtained upon the subject, it would appear probable that, like the kraal of the Kaffir, the raths were employed for a variety of purposes, in fact, for all which the simple wants of a primitive people could turn them to,—as habitations, defences, places of assembly and of public worship, pens for their cattle, and very probably as receptacles for the dead,

for the absence of tumuli generally in this part of Ireland leads to the supposition that the rath must also have been used for that purpose, and skeletons have occasionally, though rarely, been found in the crypts.

That so little is known of the contents of the raths must be attributed to the want of careful exploration. They afford an almost virgin soil to the pre-historic archæologist who will patiently and dispassionately search them in the interests of science. But I fear that they offer a somewhat uninviting field of exploration to some of those, unfortunately too numerous, antiquaries of the sister country who are bent upon seeing in every hole and corner, which at any period of antiquity might have harboured a dog, vestiges of the departed and still fading splendour of the Emerald Isle.

Besides these circular raths, some of which have double and triple banks and ditches, oval entrenchments of the same kind are sometimes, though rarely, found; and, in the central and southern parts of Munster, rectilineal works of nearly the same superficial area are distributed in belts over the most fertile parts of the country. These are devoid of underground chambers, but querns have been found in their banks, and they are associated with the same animal remains as those found in the circular forts, viz. the bones of the horse, the ox, and of the pig or wild boar.

THE BLACAS GEMS.

PART I.—INTRODUCTORY OBSERVATIONS.

By C. W. KING, M.A.

EVER since the date, now almost three centuries remote, when Lorenzo dei Medici commenced founding his celebrated Cabinet of Antiquities, *Engraved Gems* have constantly been regarded as an important complement, or rather, essential portion of every national collection of works of art. And the reason is obvious to all who have given any attention to the subject. Gems are the sole imperishable vehicle of ancient genius; they alone preserve to us the reflex of the departed glories of much of statuary, and of all of painting in the times from which they have descended to our own. The traditionary fame of Theodorus, Lysippus, and Eutychides, of Pamphilus, Parrhasius, and Apelles, is confirmed by no surviving evidence but what is to be deduced from them. Indeed, as a recent writer has tersely and happily expressed their claims to our attention: "In the gems that have been worn by any civilised people we possess an epitome of that people's arts, their religion, and their civilization, in a form at once the most portable, the most indestructible, and the most genuine."[1]

Stimulated by the example, and well-merited fame of the "Magnificent" Florentine, the other Italian princes, the Valois kings of France, the German emperors, and many of their electors, and last, but assuredly not least, the Czarina of Russia, cultivated, with emulous zeal, this branch of amateurship, and formed the early established and splendid cabinets of the Vatican, Venice, Mantua, Parma, Naples, Paris, Vienna, Heidelburgh, Dresden, Berlin; and most recent, but infinitely the most extensive of all, that of the Hermitage, St. Petersburgh, so wonderfully enriched of late years, from the exploration of the tomb-treasures of Kertch.

[1] Edinburgh Review, Oct. 1866, p. 528.

But in our own country the national fund of antique art, stored up within the British Museum, though equalling, perhaps surpassing, any of its rivals on the Continent, in many important branches—classical sculpture, and fictile work, Assyrian, Egyptian and Celtic remains, but especially in numismatics—continued deplorably inferior to any, even the most inconsiderable amongst them, in all that concerns Glyptic Art. All that the Museum could *exhibit* in that line (if such a term may be used of things most carefully secluded from the public gaze) were the united small collections of three or four private amateurs—Townley, Payne Knight, Hamilton, Cracherode,—comprising, it is true, much that was pretty, but very little that was important, or commensurate with the requirements of their dignified place. This deficiency may, in great part, be attributed to one circumstance, the very recent foundation of the British Museum—the youngest of its sisters in Europe—its existence only commencing in 1753 with the transfer of the Sloane collection to Montague House. In fact for many years afterwards it remained a mere gallery of natural history and public library united; as a repository for monuments of ancient art, its creation only commences with the beginning of the present century, the purchase of the Townley marbles, &c., in 1804.[2]

A national collection, carrying out the idea in its completeness, had indeed been inaugurated long before, by Charles I., a prince possessing a refinement of taste, coupled with a knowledge of art, perfectly astonishing in one of his unfavourable position and semi-barbarian surroundings. He had joined to his noble collection of pictures, statues, and medals a respectable cabinet of gems, based upon that of Gorlæus[3] (the first formed this side of the Alps), which had been purchased by his father, in 1609, for the use of Henry, the then Prince of Wales. This, however, was dispersed at the sale of the Whitehall Gallery by the Parliamentary Commissioners, and several of its former members encountered my observation, safely harboured ever since that disaster in the Arundel, now Marlborough, Cabinet. Almost coincidently with the appointment of the British Museum as

[2] At a total cost of £28,200: it was not opened to the public before 1808.

[3] Of Delft, where he published in 1601, "Gorlæi Dactyliotheca," with copperplates of all his gems; reprinted in 1609 and 1695.

a repository for the treasures of ancient art, the taste for Glyptics in this country for causes unnecessary here to recapitulate, began rapidly to decline and soon totally expired, and thus all knowledge and interest in the pursuit simultaneously died out amongst the directors of the department of antiquities in that institution. The visitor to its public rooms would, for an interval of full quarter of a century, naturally have supposed the very existence of the Glyptic art to be ignored by the authorities of the place: its few gems, all resulting from previous bequests or purchases, being only accessible by special permission and under very incommodious restrictions. During this long intermission, some very important collections of gems had from time to time been offered for sale to the Trustees; in some cases the timidity of conscious ignorance stood them in the place of critical knowledge, as when it prevented their acquiring (in spite of popular clamour) the then so extravagantly puffed Poniatowsky forgeries; but in too many others, alas! it occasioned the loss of golden opportunities such as fortune never offers twice. But *now*, happily, the cloud has passed away, and with "the right man in the right place," zeal going hand in hand with intelligence and taste are all assiduously labouring to raise this long-neglected section of their charge to a level with the high condition of the others surrounding it; and to make the *locale* as its name properly denotes, in its fullest sense, "a Temple of the Muses." A most auspicious beginning was made (in the summer of 1865) by the purchase of the, not extensive, but most choice collection, which the exquisite taste, great opportunities, and long continued researches of Signor Castellani had gathered from the flower of many an ancient, but now dispersed *cimelium*. So full of interest is every individual piece in this true *anthology* of Glyptics, that a detailed description of the whole would form a valuable addition to the literature of Dactyliology; for, although deficient in celebrity amongst the uninitiated, as being the work of a *private* collector, yet the practised connoisseur will discover far more to reward his study within its limited numbers, than in many another of vastly greater extent and more widely diffused reputation. Again (in the winter of 1866) the good work was continued, and this department of the national collection raised at once to a respectable *status* by a step displaying equal boldness

and sound judgment. This was the unhesitating acquisition, without mistimed stickling at terms (which lost the French government the opportunity, to their everlasting regret) of the art-treasury of the Duc de Blacas, rich in numismatics, sculpture, and vases; but above all, bringing what filled up the deficiency beginning so sensibly to be felt amongst ourselves—his Cabinet of Gems, equally important for extensiveness (951 pieces in all), completeness of series, rarity and beauty of most of its constituents; and last, by no means the least consideration in the case of an acquisition made for the nation (where the opinion of the *profanum vulgus* as well as of the *mystæ* must be consulted by the keepers of the public purse), the great celebrity this collection has enjoyed, under various names, for above a century and a half. For it has grown up to its present magnitude under the unremitting cultivation of the two Ducs de Blacas, who, profiting by opportunities that spread over a space of fifty years, have amalgamated into one, much of the far-famed Strozzi (formed at Rome early in the last century, and eulogised by Visconti as "containing a larger proportion of fine gems than any other of the kind") the De la Turbie,[4] the Schellersheim, and the well-chosen cabinet of Dr. Barth, physician to Joseph II. All of these sources are well known to the student of the subject, having been largely quoted from and published by such eminent authorities as Winckelmann, Gori, Köhler, Visconti, Panofka, Dr. Brunn, by the editors also of the "Trésor de Glyptique" and of the "Impronte Gemmarie."

It has been represented to me, by one of all others the best enabled to judge, that a brief notice of the principal features of this splendid addition to our national art-treasures, drawn up in the same manner as my Notices of the Royal and Marlborough Gems, which appeared in this Journal (vols. xix. and xx.), would not be unacceptable to its readers—a labour of love which such an assurance has induced me very willingly to undertake. And it would be most ungrateful in me did I not preface these remarks with an acknowledgment of the great obligations I am under to Mr. Newton, the head of the department, and subsequently to Mr. Corkran

[4] Formed at Turin towards the end of the last century. From it Visconti drew the fine portraits of Miltiades, Posidonius, and Juba II., for his Iconographia Greca, published 1808.

of the medal-room, for the ready kindness with which they have afforded me every facility for making my notes, by the close and repeated examination of the gems,—a concession necessarily involving, on their part, the expenditure of much valuable time. In the second place, as some of my remarks will most assuredly run counter to the commonly-received opinion amongst connoisseurs, and especially so as regards the noble founders of the cabinet before us, I must be allowed, in justice to myself (as a defence against the charge of "jaunty audacity" to which I should otherwise be exposed for thus summarily deciding a truly "vexata quæstio" in the study), to introduce my critique with a brief statement of the grounds on which my judgment is founded concerning the real nature of the numerous supposed "artists' signatures" which embellish this collection, and have added so enormously to its cost.

The senior Duc de Blacas, fully possessed with the prevailing hallucination of all the archæologists of his day, firmly believed in the common existence of the artist's signature upon his works, and devoted all his efforts to the acquisition of gems thus authenticated to the eye of faith. It is, however, equally certain to me, that in no one instance was his pursuit rewarded by incontrovertible or even probable success. Even Dr. Brunn, with all his extreme indulgence to credulity on this point, rejects the claims of all the pretendants to this most coveted honour in the Blacas cabinet (or in those out of which it is composed), with the reservation of three only; the Germanicus of *Epitynchanus*, the Hercules of *Gnæus*, and the Medusa of *Solon*. The unsatisfactory nature of the pretensions of even this miserable remnant of so goodly a host shall be pointed out, and, probably, demonstrated to the satisfaction of every one competently acquainted with ancient usages, when the particular gems come to be described in my list; but, as before said, it is better to premise with my own conclusions, the result of long study of this very intricate subject. This intricacy indeed is the result, not so much of the true nature of the question, as of the obscurity thrown over it by modern fraud, for which, in one shape or another, it has been the favourite field ever since the revival of the taste for gem-collecting.

And to begin, experience forces me to avow my conviction that the rules laid down with so much "form and circum-

stance" by Dr. Brunn,[5] are in their nature entirely arbitrary, inconsistent with themselves, and controverted by numerous and decisive examples. Reduced to their true elements, his rules require nothing more for establishing the fact that the name inscribed on any *fine* gem must indicate the engraver, than these three peculiarities: that it be in *Greek* characters; written in a *straight* line either across or along the field; and to have been published *before* the year 1712. This last was the date when the publication by Baudelot de Dairval of the *surmise* expressed by that "glass of fashion and the mould of form," the Regent Orleans, that "Solon" on the Vienna Mæcenas meant the engraver, not the original of the portrait, furnished that unlucky starting point to roguery and credulity which, in a few years, stocked every cabinet with *signed* works, and espied the artist's in every name on a gem.

The single criterion which I advance in opposition to Dr. Brunn's code as the only sure one, is of a very simple nature. My own firm conviction is, that in the very exceptional cases where the ancient gem-engraver either thought good, or was permitted, to sign his works (whether trial or masterpieces), the name was invariably followed by ΕΠΟΙΕΙ. We have proof positive that this was done in the instances of those greatest triumphs of the art—the Stork of Dexamenos the Chian, the Arsinoe (wrongly restored as a Julia Titi) of Nicander, the Brutus of Heraclidas, the Minerva of Eutyches, the Julia of Evodus, &c. Such a form of signature was the universal rule in sculpture painting (as the vases conspicuously attest) and mosaic-work; how utterly inconsistent with reason, therefore, to suppose the practice dropped, where alone such precision was absolutely *necessary* to prevent the artist's name from being mistaken for that of the owner of the gem, since the latter, upon so many signets, was wont to accompany the device. This single objection has, with me, more than sufficient force to sweep away the pretensions of all names not followed by this unmistakeable certificate of authorship.

As to the subtle distinction of position, in the *field* instead of along the *margin* of the work, every large collection supplies instances of the undisputed owner's name introduced

[5] "Geschichte der Griechischen Künstler."

in every possible variation of place that was suggested by the engraver's taste, as either interfering least with the effect of the design, or as presenting *itself* more conspicuously to the world, in proportion as his employer's love for the æsthetic or for the practical happened to preponderate. Lastly, *Greek* was used by everybody at Rome, as being the language of politeness and art, as early as Cato the Censor's days, when people of fashion "thought nothing good that was not Greek." Such persons, therefore, when they got their signets engraved by Greek artists, not merely used the Greek character,[6] for their own superscription, but carried still further their adoption of Grecian usage, and admitted the *prænomen* only as the proper designation of the individual, dropping the Roman *nomen* of the family as both superfluous and barbaric. For the Greek had only one name, followed, if distinction was desired, by that of his father, or native city. This hypothesis alone offers a rational explanation for the appearance upon gems of ΑΥΛΟC, ΓΑΙΟC, ΓΝΑΙΟC, ΛΕΥΚΙΟC, and such like Roman *prænomina*, written in Greek letters. It was *impossible* that these could be borne by the Greek engravers of the gems; who if free born were called after the fashion of their country by significant appellations, as Dioscorides, Eutyches, Herophilus, and similar terms of good omen; or, if freedmen of patrician amateurs, had assumed upon manumission the family names of their *patroni* in addition to their own proper names: to take for example the eminent instances of *Antonius* Musa, *Manilius* Antiochus, *Staberius* Eros. No born Greek could have been denominated Aulus, or Gnæus, or Lucius, simply, and we may be sure from the analogy of the other arts flourishing under Roman patronage, as well as from the few unquestionalbe records transmitted to us in this, that all the best gem-engravers established at Rome were Greeks. And even allowing for a moment such an infraction of all the laws of ancient nomenclature, the notion of a mere artist signing his work with his bare prænomen, Aulus, Gnæus, &c., is in its very nature as preposterous as to imagine a modern designating himself on any of his performances by his Christian name alone—John, or William. Besides, it was as impossible for

[6] It would be difficult to produce a fine intaglio inscribed in Latin, unless where such inscription is evidently the addition of a later and ruder hand.

the former to have constituted the single appellative of the individual Greek, as for the latter to be the surname of the individual Englishman. The two cases are exactly parallel. But when we recollect that certain prænomina were almost hereditary in the same Roman family, Gnæus, for example, recurring in every generation of the Cornelia, Aulus of the Postumia, Tiberius of the Claudia, &c., it will be perceived how the prænomen, especially when appended to the well-known signet-device of the *gens*, was amply sufficient to designate to the receivers of its impression, the individual of the family who happened to bear it at the time. It will also be noticed that in their familiar epistles the Romans sign themselves, and address their correspondents, by their prænomina alone, as "Marcus Quinto S." Modern usage still in some cases perpetuates the custom; royalty, and episcopal dignity signing with the Christian name alone, the latter adding, for distinction's sake, the See giving the title.

As for signatures on *camei*, when *incised*, by far the greater part are palpable modern interpolations, and the extremely few amongst their large number that stand the test of the microscope, being declared by their very nature subsequent additions (though of ancient hands), are for that reason of no authority upon the point under discussion: for common sense suggests that they denote nothing more than ownership. On the other hand, signatures in *relief* are as a necessary consequence contemporary with the actual making of the cameo, and therefore their genuineness rests upon exactly the same grounds as that of the whole of the work: but these are rare in the extreme, and the cabinet under consideration cannot boast of a single specimen. And even in these so uncommon examples, the remarkable coincidence that the names so displayed are the same as those borne by eminent painters and sculptors of the earlier Greek school, "Athenion," "Boethus," "Protarchus," &c., make it more than probable that such inscriptions perpetuate—not the fame of the engraver who actually cut them for his Roman employer, but of the celebrated "old master" whose *chef-d'œuvre* he thus reproduced in a more precious and imperishable material. Names of equal note in the higher walks of art, Myron, Pamphilus, Panæus, Polycletus, Scopas, &c., present themselves not unfrequently incised upon intagli. In most cases the first glance suffices

to tell the practised eye that these ambitious signatures are equally spurious with the works they pretend to authenticate,—these names being naturally such as the half-educated Italian forger would be the first to lay hold of. There are left, however, a few out of the multitude, like the ΠΑΝΑΙΟΥ ΑΦΡΟΔΙΤΗ (Paris), that satisfy the requirements of the severest criticism, and the existence of such can only be rationally explained on the supposition advanced above, with respect to the same kind of signatures occurring on camei. As all archæologists allow that much admired statues and pictures of previous ages were as a matter of course copied by subsequent gem-engravers, who being too modest to invent designs, were not ashamed to borrow from what had been done perfectly before; it is very conceivable that the avowed copy of an ancient masterpiece would be considered all the more valuable for being marked with the name of its real author.

And to conclude, the names scratched in with all but invisible letters, and evidently only to be executed by the aid of a powerful lens, do in every way betray their own falsity. The genuine signatures must have been cut with the same instrument, guided by the same eye as the other details of the work; besides which, in all the indisputable examples extant, the engraver, so far from endeavouring to conceal his authorship under the cloak of modestly inobtrusive characters, has inscribed his name and "made this" in bold letters conspicuous to all that read.

(*To be continued.*)

ROMAN COINS STRUCK IN BRITAIN.[1]

No attempt has yet been made to class separately the Roman coins struck in Britain. Had this been done, it would have been perceived at once that the coins of Constantine I. and other members of his family with the mint-mark PLON, are the continuation of those marked PLN, and that there is another class of unmarked coins which connects the coinage of Allectus with the latter, and completes an unbroken series from Carausius to Constantine I.

Each of these classes begins exactly where the preceding ends, and the *connecting links* are of similar style and fabric. Had the unmarked London coins of Diocletian, Maximian, and their successors, been of the same size as the copper of Carausius and Allectus, this similarity might perhaps have been detected, but such a result was most effectually prevented by the laws of numismatic orthodoxy, according to which they are classed separately, under the names of second and third brass.

The mint-mark L, which appears on many coins of Carausius and Allectus, was dropped for a time at the restoration, no doubt because it was then used, as we shall see, by the mint of Lyons. The marks of the two mints of London and Lyons afterwards became, respectively, LN or LON, and LG or LVG.

A brief sketch of the Roman series will enable the reader to form an idea of the relative importance of the two British mints, London and Camulodunum, considered as a part of the general system.

The Roman coinage is divided by an event which took place in 260, the defeat and captivity of Valerian, into two very distinct classes. The first is to a great extent *local*, the second strictly *imperial*.

The disaster of Valerian brought to a crisis the bank-

[1] Communicated to the Section of Antiquities at the Annual Meeting of the Institute held in London, July, 1866.

ruptcy which had long been impending. From the time of Septimius Severus, and even earlier, the silver currency had been gradually debased, though still issued at the rate of 25 denarii to an aureus, while the taxes and government dues had to be paid in pure gold. The early billon coins of Gallienus, which are matched by analogous coins of his father, contain a small proportion of silver, but the later ones, which are not accompanied by any of Valerian, and strongly resemble those of Claudius II., are made of copper, washed with tin.

In consequence of this bankruptcy, the bronze and copper fractions of the now worthless billon denarii naturally ceased to be issued, both at Rome and in the towns and dependent states which still availed themselves of their right of coining these metals. The whole coinage thus became imperial, and remained so through every successive change.

We find in the early period of the Roman coinage—

1. A series struck at Rome, complete as to silver, but with gaps in the gold and copper, which were not issued at all times.

2. Gold, silver, and copper coins, struck in other parts of Italy and in the provinces, by Roman magistrates, generals, and emperors. These coins are easily recognised by their peculiar fabric, and are generally traceable to events which account for their issue. In the republican period, we find many struck during the Punic and civil wars, the former in Italy only, the latter in every part of the Roman dominions. During the triumvirate and empire, they were chiefly issued at Lyons, Ephesus, and Antioch. There is a numerous class, struck at Lyons during the triumvirate and the Cantabrian and German wars under Augustus; this includes, amongst other coins, all those with the reverses IMP. X-XIIII., which refer to the pacification of Spain and to the campaigns of Agrippa, Tiberius, and Drusus in Pannonia and Germany, from 740 to 746. The coins of Clodius Albinus with the title of Augustus were also no doubt struck there, while those of Pescennius Niger are of Antioch fabric, as well as many issued during the Parthian and Persian wars of Septimius Severus and his successors. The Jewish war accounts for numerous coins of the reign of Vespasian struck both at Ephesus and Antioch.

3. Silver and copper coins issued by Roman colonies,

municipia, cities, and dependent states which possessed, or had received or been allowed to retain, the right of coining. Rome reserved for herself the right of issuing gold, and with very few exceptions, also silver, but allowed a local system of copper coinage in the towns and states entitled to mints of their own.

No coins of this description were ever struck in Britain, and comparatively few in the other Western provinces. Britain, Gaul, Spain, and the greater part of Africa were in a semi-barbarous state at the time they were conquered, and their national currency disappeared. It was replaced by that of Rome, which soon took almost exclusive possession of the vacant ground. The development of the local coinage was checked very early; it ceased in Italy and Sicily soon after the death of Augustus, and in the other provinces before the accession of Vespasian.

In the civilized countries of the East, where the Roman monetary system had grafted itself upon, instead of superseding, the former state of things, the local mints remained in activity till the reign of Gallienus, and there are even a few coins of this category struck during the reigns of Claudius II., Aurelian, and Tacitus. The civic mint of Alexandria did not become imperial till the reign of the usurper Domitius Domitian, of whom there are both Greek and Latin coins.

The absence of mint-initials creates some uncertainty in the classification of the coins of Gallienus and his successors. It is the rule before the monetary reform of Diocletian, which took place about the time of the elevation of Constantius and Galerius to the rank of Cæsars, and the exception after that change. When they are wanting or doubtful, we must be guided by style, fabric, metal, types, and other peculiarities.

We find in the later period of the Roman coinage positive indications of twenty-one, or rather twenty-four, mints:—

1. Camulodunum, established by Carausius, and suppressed after the death of Allectus.

2. London, established by Carausius, and suppressed, as we shall see, about the time of the dedication of Constantinople.

3. Treves, established at the time of the monetary reform of Diocletian.

4. Lyons, established by Gallienus, of whom we find billon coins of the same fabric as those of Postumus.

5. Arles or Constantina, established by Constantine I., after the overthrow of Maxentius and Maximin.

The three mints of Treves, Lyons, and Arles were suppressed after the downfall of Eugenius, and restored for a short time by the usurpers Constantine and Jovinus.

6. Amiens, *Ambianum*, established by Magnentius, and suppressed soon after his death by Constantius II.

7. Tarragona, established by Aurelian, if not earlier, and suppressed at the same time as London. Its mark T was afterwards occasionally used at Thessalonica.

8. Carthage, established at the time of the monetary reform of Diocletian, transferred by Maxentius to Ostia in consequence of the rebellion of Alexander, and suppressed or transferred to Arles soon after the conquest of Italy by Constantine I.

The mark K preceded by P belongs to Carthage; in all other cases to Cyzicus, to which may also be ascribed, on account of their Eastern fabric, the coins of Probus marked CM. or MC. KA, before the monetary reform of Diocletian, is not a mint-mark, but the Greek translation of the Latin numeral XXI, indicating the number of base denarii which, according to the monetary reform of Aurelian, were equal to the silver denarius, or twenty-fifth part of the aureus. In the provinces reclaimed from Tetricus, the proportion of the old to the base denarius seems to have been, till the middle of the reign of Probus, as one to twenty instead of twenty-one. After the monetary reform of Diocletian, PKA and KA mean, respectively, "struck in the first *officina* of the mint of Carthage, or Cyzicus," and we then find also PKB, KB, etc.

9. Rome.

10. Aquileia, established at the time of the monetary reform of Diocletian, probably transferred by Honorius to Ravenna, and restored for a short time by Theodosius II., during the war against the usurper John.

The mark of Aquileia is always AQ; A on billon and copper belongs to Arles; on gold it is always coupled with Ξ, 60, the number of coins struck out of a pound of metal under Diocletian, Galerius, Maximin, and Licinius, and belongs to Antioch.

11. Milan, *Mediolanum*, established after the defeat of

Magnentius by Constantius II., and suppressed about the beginning of the Ostrogothic period.

12. Sirmium, established at the same time as Milan, suppressed after the death of Valentinian I., and restored for a short time by Theodosius I., probably during the war against Eugenius.

13. Siscia, established by Probus, if not earlier, and probably suppressed or transferred to Sirmium at the death of Valentinian II. The mark s belongs to it, and not to Serdica or Sirmium.

14. Thessalonica, established at the time of the monetary reform of Diocletian, and suppressed about the time of Zeno.

15. Serdica, established by Aurelian, if not earlier, and perhaps a continuation of the local mint, the last coins of which are of Gallienus. It was transferred by Constantine I. to Sirmium after the first war against Licinius, and thence to Constantinople after the second.

There is some difficulty in distinguishing the mint-marks of Constantina from those of Constantinople. CONST. or CON., *preceded* by a *Latin* differential letter, or accompanied by OF. I, II, or III in the field of the reverse, belong to Constantina, where we also find KONSTAN on gold, under Constantius II. and his successors, KA, followed by the differential letter P, on a few silver coins of Valentinian I. and Gratian, and KONT on silver, under the usurpers Constantine and Jovinus. All other *Constantinian* marks, with two exceptions, COM and COMOB, belong to Constantinople, and the differential, when there is one, is a *Greek* numeral which *follows*, when placed in the exergue, the indication of the town.

COM and COMOB belong to Rome, when not accompanied in the field of the reverse by the initials TR, LD, AR, MD, AQ, RV or SM. Both are also found with RM, and COB, the contraction of the latter, with RV. These marks, used in the mints of the Western empire, evidently mean "struck according to the standard of the mint of Constantinople." With regard to the interpretation of OB, on which so much has been written, I beg to refer the reader to an article published by the late M. de Pétigny in the Revue Numismatique of 1857, p. 115, in which he gives most convincing arguments for reading *obryza*, pure gold, instead of seventy-two, the number of solidi coined out of a pound of metal.

These remarks do not apply to the Byzantine gold coinage

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Coins of Carausius and Allectus.

287-290? Coins of Carausius without mint-marks and mostly of inferior workmanship.

290?-293 Gold and copper coins of Carausius with the mint-mark of London, and copper only with that of Camulodunum. His silver coins with the exergual mark R S R probably belong to this period and to the mint of London. Also gold and copper coins of Maximian with the mint-mark of London, and copper of Diocletian with those of London and Camulodunum, all struck by Carausius. No gold coins of Diocletian struck in London, nor copper of Maximian struck at Camulodunum have yet been found, but there can be little doubt of their existence.

293-296 Gold and copper coins of Allectus with the mint-mark of London, and copper only with that of Camulodunum. He does not seem to have issued any silver. The large copper coin called *follis* was introduced in the continental provinces about this time, and was issued at the restoration instead of the copper denarius of the two usurpers. The mint-mark of Camulodunum, C or CL, which may also be read Colonia, disappears after the reign of Allectus, and nothing but copper and billon seems to have been coined in London during the reigns of Maximian, Constantius, and Constantine.

Copper Coins without Mint-marks.

Plate I.

296-305 Diocletian augustus
Maximian augustus, No. 2.
Constantius cæsar, No. 1.
Galerius cæsar
} GENIO POPVLI ROMANI

Although mint-marks are wanting, the attribution of these coins to Britain may be considered as certain. The earlier are similar in style to the coinage of Carausius and Allectus, and unlike that of the continental mints of the same period. The later, as well as those that follow, are imi-

tated from the better designed coins issued by the mints of Gaul.

305–306	Diocletian after abdication Maximian after abdication, No. 3.	PROVIDENTIA DEORVM QVIES AVGG.
	Constantius augustus, No. 4. Galerius augustus Severus cæsar, No. 5. Maximin cæsar	GENIO POPVLI ROMANI
306	Severus augustus, No. 6. Constantine cæsar	

Besides these coins, in which the bust is always paludated, robed, or cuirassed, there is an extremely rare set of Diocletian and Maximian as augusti, and Constantius and Galerius as cæsars, with the mint-mark LON, the bust bare, and the usual reverse GENIO POPVLI ROMANI. There are three sets of the same tetrarchy, with the same reverse, which from their fabric evidently belong to the mint of Lyons, and not to that of London. In the two first, the bust is always bare, in the third either bare or ornamented. The mint-mark is wanting in the first; it is, in the second, L A or L B, and in the third, L P or P L with A or B.

COPPER COINS WITH OR WITHOUT P L N.

306–307	Diocletian after abdication, No. 7.	QVIES AVGG. GENIO POP. ROM.
	Galerius augustus, No. 8.	GENIO POP. ROM.
	Maximin cæsar	GENIO PP. ROM.
	Constantine cæsar	GENIO POP. ROM. MARTI PACIF. MARS VICTOR ROMAE AETER.
306–310	Maximian after abdication, No. 9.	GENIO POP. ROM. HERCVLI CONSERVATORI MARS VICTOR MARTI PATRI PROPVGNATORI ROMAE AETER.

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306–312	Constantius after death	MEMORIA FELIX
307–312	Constantine augustus	GENIO POP. ROM.
	No. 10.	MARTI PATRI PROPVG.
		PRINCIPI IVVENTVTIS

These coins are smaller than those of the preceding class, and there is a further gradual reduction in the two next.

COPPER COINS WITH PLN AND A STAR IN THE FIELD.

312–317?	Constantine augustus	ADVENTVS AVG.
		ADVENTVS AVG. N.
		ADVENTVS AVGG. NN.
		COMITI AAVGG.
		COMITI AVGG. NN.
		CONCORD. MILIT.
		FELICITAS AVGG. NN.
		MARTI CONSERVATORI
		PRINCIPI IVVENTVTIS
		ROMAE RESTITVTAE
		SECVRITAS AVGG.
	No. 11.	SOLI INVICTO COMITI
		SPES REIPVBL.
	Licinius augustus	COMITI AAVGG.
	No. 12.	GENIO POP. ROM.
		SECVRITAS AVGG.
312–313	Maximin augustus	COMITI AAVGG.
	No. 13.	GENIO POP. ROM.

COPPER COINS WITH MLL, MSL, MLN OR PLN AND F, SF, SP, TF, A CRESCENT OR A CRESCENT AND STAR IN THE FIELD.

317?-321?	Constantine augustus	ADVENTVS AVG. N.
		GENIO POP. ROM.
		MARTI CONSERVATORI
	No. 14.	PRINCIPI IVVENTVTIS
	No. 15 and Pl. II. No. 1.	SOLI INVICTO COMITI
PLATE II.	Licinius augustus	GENIO POP. ROM.
	No. 2.	SOLI INVICTO COMITI
317–321?	Crispus cæsar No. 3.	PRINCIPI IVVENTVTIS
		SOLI INVICTO COMITI
	Constantine jun. cæsar	PRINCIPI IVVENTVTIS
	No. 4.	SOLI INVICTO COMITI
	Licinius jun. cæsar	no coins yet found.

Copper Coins with P L N.

321?–323	Constantine augustus Crispus cæsar No. 5. Constantine jun. cæsar	VIRTVS EXERCIT.

Billon Coins with P L N, or two captives with or without P L.

312–323 317–323	Constantine augustus Crispus cæsar No. 6. Constantine jun. cæsar	VICTORIAE LAETAE PRINC. PERP.

Copper Coins with PLON and Head to Right or Left.

323	Constantine augustus Crispus cæsar No. 7. Constantine jun. cæsar	BEATA TRANQVILLITAS VIRTVS EXERCIT.

Copper Coins with PLON and Head to Right.

323–330?	Constantine augustus	PROVIDENTIAE AVGG.
	No. 8.	SARMATIA DEVICTA
323–326	Crispus cæsar	PROVIDENTIAE CAESS.
	No. 9.	VOTA X CAESARVM NOSTRORVM
323–330?	Constantine jun. cæsar	PROVIDENTIAE CAESS.
	No. 10.	VOTA X CAESARVM NOSTRORVM
	Constantius jun. cæsar, No. 11.	PROVIDENTIAE CAESS.
323–326	Fausta augusta, No. 12.	SALVS REIPVBLICAE
323–328?	Helena augusta, No. 13.	SECVRITAS REIPVBLICE

Copper Coins of the Reign of Constantine not found with the Mintmark of London.

330?–337	Constantine augustus Constantine jun. cæsar Constantius jun. cæsar	GLORIA EXERCITVS
333–337	Constans cæsar	
335–337	Delmatius cæsar	
	Hannibalian king	SECVRITAS PVBLICA
330?–337	Helena after death	PAX PVBLICA
	Theodora after death	PIETAS ROMANA
	Rome	URBS ROMA
	Constantinople	CONSTANTINOPOLIS

These types must have been introduced about the time of the dedication of Constantinople in 330, and there can be little doubt that the London mint, which was not very important, was suppressed in the general reorganization of of the empire which then took place. The London series is less complete than those of some of the continental mints. It is therefore necessary, in order to determine even approximately the date of a class of coins of the London mint, to compare it with the corresponding class of other mints, particularly of that of Treves.

Revival of the London Mint by Magnus Maximus in 383.

There are very rare gold solidi of Magnus Maximus with the legend VICTORIA AVGG. and the mint-mark AVGOB, No. 14, which are generally supposed to have been struck at Treves, but as we have similar coins of this usurper with both SMTR and TROB, it is far more likely that AVGOB belongs to Londinium Augusta than to Augusta Trevirorum, better known under the later empire by the name of Treviri (Smith's Geographical Dictionary, LONDINIVM and AVGVSTA TREVIRORVM).

That Magnus Maximus should have revived the mint of London is not to be wondered at. He rebelled in Britain, and some time elapsed before he got possession of Gaul and of the mints of Treves, Lyons, and Arles. A mint was indispensable to a Roman emperor, and particularly so to one who owed the purple to his army. Had he failed to overthrow Gratian, these Augusta coins would have been the only numismatic record of his usurpation.

It is very likely that this mint was again suppressed when Magnus Maximus had established himself in Gaul. At all events, it does not seem to have been kept up after his death, as we have no London coins of his successors, Valentinian II and Eugenius. After the defeat of the latter by Theodosius in 394, the three Gallic mints were closed till revived under Honorius by the usurpers Constantine and Jovinus (407–413).

There is at the British Museum a solidus of Theodosius I with the mint-mark AVGOB, and the same reverse as those of

Magnus Maximus, No. 15. It is of inferior pale gold and of bad workmanship, and probably belongs, not to the imperial mint of London, but to a numerous series of barbarous imitations which, together with the coins of the usurpers Constantine and Jovinus, fills up the interval between the last Gallic coins of Eugenius and the several classes, of still more barbarous workmanship, traceable to the Visigothic, Burgundian, and other early mediæval monarchies.

Since this paper was read Mr. John Evans has met with, and has most kindly offered to the national collection a specimen, unpublished and hitherto unique, of the silver struck in London by Magnus Maximus. This coin is not very well preserved, and weighs 27.5 grains. The legend of the reverse is, like that of the solidus, VICTORIA AVGG., and the exergual mint-mark AVGPS instead of AVGOB. No. 16.

A second specimen of the London silver coinage of Magnus Maximus, in very bad condition, has just been deciphered and most generously presented by Mr. John Evans to the British Museum. It is of the same size as the former, and the reverse is VOT. V MVLT. X in a wreath, with the exergual mark AVG. Both these hitherto unique coins are from the same find, concerning which I have not been able to obtain any information.

J. F. W. DE SALIS.

NOTES ON SOME VESTIGES OF ROMAN OCCUPATION IN DORSET.[1]

By the Rev. JOHN H. AUSTEN, M.A., F.G.S.

WERE each spot indicated by reference to an elaborate map, and in detail, where evidence exists and relics have been found of Roman location, the county of Dorset would represent a district more strictly Roman than, seemingly, any other of like area in the south of England.

My especial object, however, is, whilst I travel along the great road, the Ikenield Street, and the vicinal ways which traverse our county, to show that there exists a Station, unknown to the late Sir Richard Colt Hoare, which, as I imagine, might have been the actual *Vindogladia*, instead of the British town, situated about two miles nearer to Old Sarum, upon Gussage-cow-down, which he has fixed upon as such. It is stated that when Britain became divided into Roman provinces, the district of the Durotriges was included in that termed "Britannia Prima," having for its boundaries the English Channel, St. George's Channel, the British Channel, the Severn, and the Thames.

But it is not my province to describe the whole of this district. My plan is rather to proceed by road, picking up some of the *itinera* where they enter our county, pointing out their transit, exit, and destination; and then, retracing my steps, to allude to a few amongst the many noteworthy localities which present evidence of Roman occupation. But, first, I would refer to Dr. Guest's paper on "The four Roman Ways,"[2] and to Mr. Charles Warne's lately published Map of Ancient Dorset.

It will be sufficient for my purpose to quote Sir Richard Hoare, avoiding controversy. Previously to the Roman Conquest there had been very many British trackways,

[1] Read at the Meeting of the Archæological Institute at Dorchester, July 1865.

[2] Arch. Journal, vol. iv., p. 99.

which traversed our downs, leading to the settlements of the Britons, but differing widely in character from the improved causeways of the Romans.

Sir Richard Hoare, in his work upon Ancient Wilts,[3] speaks of five British streets, viz. :—

1. The Watling Street. From Richborough in Kent, by London, to Caernarvon and Chester.

2. Ikenield Street. From the coast of Norfolk, near Yarmouth, to Old Sarum, and through Dorsetshire.

3. Akeman Street. From the east, by Bedford, to Caermarthen.

4. Ryknield Street. From the mouth of the River Tyne to St. David's.

5. Ermyn Street. From the eastern side of Scotland to Pevensey, crossing the Ikenield at Royston.

And to these he adds a sixth, not mentioned in the Itineraries. The Fosse Way. From the south coast to Bath.

The road which I chiefly have to travel is the Ikenield Street, formed on the basis of the British road so called, and which derived its name and origin from the country of the Iceni. It is supposed to have proceeded from the coast of Norfolk, near Yarmouth, by Newmarket, to Royston, where it crossed the Ermyn Street, and to Dunstable, where it met the Watling Street; thence to Streetley-upon-Thames, where it threw off a collateral branch known by the name of the Ridgeway, which enters the county of Wilts at Ashbury. After the separation it proceeded by Silchester and Newbury (?) to Old Sarum; thence, at a distance of about nine miles, it enters Vernditch Chase, where it presents a noble example of Roman road-making. Leaving Vernditch Lodge a little to the right, it traversed Grymsdyke, an ancient boundary ditch; continuing its course along the Chase, it issues through the forest gate on to an open down, where it assumes a bold and perfect form, until it reaches a stupendous *agger*, bearing the name of Bokerly Ditch, where it is united with the turnpike road leading to Woodyates Inn, eleven miles from Old Sarum, where it enters the county of Dorset. At Bokerly Ditch it makes an angle towards Badbury.

Sir Richard Colt Hoare speaks of this neighbourhood of Woodyates as one of the most interesting parts of our

[3] Ancient Wilts, vol. ii., Roman Æra, pp. 18—23.

district, abounding in unequalled specimens of British as well as Roman antiquities.

The Roman road, here called *Ackling Ditch*, having continued its united course with the turnpike for about a mile, separates, and takes its continued straight course over the down, where the Roman engineers have cut away a part of a British barrow. At about three miles from Woodyates it crosses what is supposed to have been a British *cursus*.

Here, observes Sir Richard Hoare, we come to one of the most interesting situations in England, where may unhesitatingly be fixed the Roman station *Vindogladia*, as recorded by Antonine and Richard of Cirencester. Gussage-cow-down, as the locality is now termed, is fifteen miles from Salisbury. The itineraries variously fix the distances between *Sorbiodunum*, Old Sarum, and *Vindogladia*, at xii., xiii. and xv. miles.[4]

With all due deference to Sir Richard Hoare's experience and research, I combat the correctness of this conclusion, inasmuch as I think that the spot which I am about to describe, called Broadford, affords evidence of a superior claim to being not only an important Roman Station, but the true *Vindogladia*; whilst that which Sir Richard Hoare has so designated is, by his own showing, an extensive and intrinsically British town, presenting no evidence of Roman location in earthworks, pavements, or even by lesser relics of any importance. His account of it is this: the earthworks on this down extend in a line from N. to S. nearly one mile, and occupy a large tract of ground sloping towards the N. E. Their interest is equal to their magnitude. We recognise them as the irregular works of a rude nation, living on the produce of their flocks and herds upon the exposed heights of our chalky downs. In them we see no regular system of fortification, nor any huge rampart of defence, no well-drawn circle nor rectilinear square. Irregularity prevails throughout, and we see before us the rude but grand outlines of an original British settlement.

On quitting Gussage-cow-down, the Roman Road continues its straightforward course, and passing between the villages of Gussage St. Michael and Gussage All Saints, ascends a hill, where it passes near to one of those very small square

[4] Ancient Wilts, vol. ii., Roman Æra, p. 29. The Plan of the supposed station of Vindogladia is given at p. 31.

earthworks which are so frequently met with upon our downs. It continues in a very perfect state till, passing through Critchel Park, it comes out into a wide green trackway to the left of a row of cottages.

"I wish," writes Sir Richard Hoare, "my readers to notice this particular spot, from which another Roman road diverges to the seaport of Poole." And he adds, in a footnote, that he twice explored this line; but that his researches, though in parts successful, were not attended with the satisfaction he could have wished. He says that there is but one part of it very evident, which is near Cogdean. It is afterwards traversed by the road leading from Poole Harbour. Its probable destination was Hamworthy, or some port in its vicinity.

Returning to the main Roman Road where we left it, we find its elevated ridge crossing the trackway and traversing several fields, and then entering and continuing in the track of a long narrow lane to the spot called Bradford Lane End, where is a modern cross-road at a short distance to the west of a cottage designated in the Ordnance Map as Sannys.

Now I must ask my readers to notice this particular spot, and to bear with me whilst I show that it is where the so-called Poole road branches off, and endeavour to prove that three or four others also did the same.

The first of these branches can only be traced by commencing at a spot near the Cogdean Elms, where its *dorsum* is distinctly visible, and so continues to the entrance gate of Upton House. In the park it has been obliterated, but beyond the plantation it may be again traced along the hedge side, at the further corner of which a small portion remains of a considerable height; so raised, doubtless, as to be above the effect of a high tide, up the Fleet, whose head it there crosses. This may be seen from the Poole Junction Railway Station. Now following, directed by compass, its course, I find that it passes on the west of the church of Hamworthy, where however another road appears to leave it at right angles, towards Poole; and thence down to the shores of the harbour to a spot called Lake, from the circumstance of a lake crossing the mud-lands from thence to Purbeck, which affords a deeper channel for boats.

In a paper read before the Purbeck Antiquarian and

Natural History Society, I suggested the probability of its continuation, either through the fissure at Corfe Castle, or up the valley which, so to speak, splits the chalk hills at Creech, to the coast at Kimmeridge. And in fact, this branch continued as an available road down to a late date. Tradition affirms that the marble was thus conveyed for building Salisbury Cathedral, and indeed a modern road still runs upon it.

We follow back this modern road to where we started at Cogdean. Here its trace is destroyed by a gravel-pit, modern roads, and cottages. But following on by compass, descending the hill, and crossing the meadows, where I learn that its course is discernible during dry summers, I arrive at a ford across the River Stour, about one mile above the town of Wimborne, opposite to a ravine in Pamphill, up which it doubtless passed to Hill Butts turnpike-gate, and on in the same direction. Its *dorsum* may be detected in one or two places, but, the country here being cultivated, it is soon lost. As it approaches the river Allen, near Barnsley, it seems to take a turn towards the north. I detected its onward course for about a mile by distinct risings in three hedge-banks, one of which was in a slanting direction, and all by compass in direct line with each other. Following on the line thus indicated, across Kingdown, I came direct through Broadford, which crosses a streamlet at the head of what has been a peat bog. Immediately beyond, at the distance of a few hundred yards, at Broadford Lane End, the spot alluded to, I came upon the main Roman Road. The value of this road would consist in its throwing off a branch to the port of Poole, supplying inland communication with the potteries and factories of the clay and Kimmeridge coal districts of the Isle of Purbeck, and also with the sheltered bays between St. Alban's Head and Weymouth.

Second Branch.

I now take my readers to a spot about a mile beyond the eastern boundary of the county, on the high road between the villages of Throop and Muscliff in Hampshire. On the south side of the road, running for several fields parallel with it, I observe an evident *dorsum* of a track-way, distinctly visible at all seasons. After about a quarter of a mile the high road, bending slightly towards the south,

crosses it diagonally. It continues visible, in its direct course, across a field towards a now cultivated drift-way, which shortly terminates at the river Stour, below the ford of Muscliff Shallow. But upon examination from a boat at the spot where it should cross, I find that halfway the water is only two or three feet deep, and the remainder not above five or six, so that a pile bridge might have been easily constructed. The line is not traceable on the western side of the river. But there being half a mile of meadow land, which is frequently flooded by waters depositing a considerable quantity of silt, this is accounted for. Following upon the map, from either end of the line which the visible portion takes, it will appear evident that westerly it continues by Dudsberry camp to Broadford; its easterly direction and destination being by Iford to Christchurch and Hengistbury Head, where a deep defensive dike crossing from the harbour to the sea, and isolating the headland, betokens Roman, if not earlier occupation.

A Third Road comes up Donhead Hollow, on the north side of the Wiltshire Hills, from the Vale of Wardour. On the top of the hill it is clearly recognisable by the side of the modern road, which, after a short distance, traverses it; but, after passing Phelps' Cottage turnpike-gate, it follows its independent course in a southerly direction, crosses Woodley Down, where flints have been frequently drawn from it for road material, and passing through a portion of the Chase, called the Wiltshire Copses, enters Dorsetshire, crosses the recently cultivated Ashmore fields, enters again the Chase woods, and may be traced about a mile further. Its direction, passing near Barton Field, the supposed ancient *Tarentum*, is towards Broadford. And tracing back its direction northward, it will be seen to be towards Bath.

Fourth Road.

It is believed that a road from or near to Bittern, *Clausentum*, traversed a district in the New Forest, where have been discovered extensive potteries, to Ringwood. A line drawn along this route, and continued, arrives at Broadford. I may, I think, then, reasonably submit the question whether this is not, most probably, the true *Vindogladia?*

But further, we may expect to find Roman stations where Roman roads join or intersect. Hard by, at Hemsworth Farm, in the Ewe leaze, are extensive irregularities on

the surface, which are clear tokens of ancient location; about a quarter of a mile distant, at West Hemsworth, some years since, workmen came upon buried skeletons; and in an adjoining field were found, something more than thirty years since, the remains of a Roman villa, consisting of foundations and six pavements, three of which were tesselated.

Thus, then, confirmatory of my theory in opposition to that of Sir Richard Hoare, I show evidence of very extensive occupation—the junction of branch roads leading to Bath, Poole, Christchurch, and Southampton—and it is within a short distance of Badbury; for the main road, leaving the lane above alluded to at this junction, traverses the corner of a field, and then proceeds in a direct line to Badbury Rings. Here it makes a sudden angle to avoid passing over or through the camp, and continues its course to Shapwick where it crosses the river Stour, and proceeds to the north of the town of Bere, near which is the British encampment of Woodbury Hill, and whence branches a road to Wareham. Here, probably, was the Station to which Sir Richard Hoare alludes as missing between *Vindogladia* and Dorchester. Near Stoke also there are traces of a road winding from Wareham towards Dorchester.

From Bere the main road passes on to Dorchester, where Trinity Church and the Town Hall are supposed to stand upon it. Thence it passes between St. Peter's Church and the Castle, appears again at the west side of the town, continues four miles on the Exeter road, and goes on to Eggerdon Hill, where is a camp. Thence it continues its course into Devonshire, where the Fosse-way meets it at Seaton, and thence to Exeter. Dorchester, though the capital of the Durotriges, became a Roman town, and retains the Roman form. Here, too, still exist an amphitheatre, a portion of the Roman wall, and several pavements, one of which, discovered in 1858 within the precincts of the county prison—the ancient castle—is preserved in the prison chapel.[5] At Frampton, a few miles to the north-west, some very beautiful pavements were discovered during the years 1794 and 1796;[6] and another at Rampisham, about seven miles distant, in 1799. There is also, close by, a circular camp of large area;

[5] This discovery has been noticed by the Rev. C. W. Bingham in this Journal, vol. xvi pp. 82, 183, with a ground-plan of the remains.

[6] Lysons, Britannia Romana. See also this Journal, vol. xvi., p. 186.

and at two miles distant, the noble earthwork of Maiden Castle; both of these, as indicated by relics found, were occupied by the Romans. From hence a road branches to Weymouth Bay, where was a chief Roman port, and upon the shore, at Preston and Jordan Hill, were locations which have afforded innumerable relics, and where have been discovered pavements, tombs, the site of a temple, &c.

I now return to the north-eastern side of the county, which seems to have been more thickly studded by Roman settlements and locations, and to be richer in relics than elsewhere. I take the angle occupied by Cranborne Chase, which is traversed by some of the roads that I have described.

Looking over the Vale of Wardour, we have the square encampment of Winklebury, supposed to have been occupied by Vespasian. On Berwick Down are earthworks whence I have obtained fragments of Roman pottery, &c. About the village of Tollard Royal similar fragments frequently occur. Upon Tollard Green there is evidence of very extensive location, where, some few years since, the foundations of Roman buildings were dug out, for the purpose of road-making; and I have myself explored, in the immediate neighbourhood, with moderate success. Half a mile south, upon the property of J. Farquharson, Esq., Roman foundations were eradicated about twenty years since; about one mile and a half further south, is the supposed Tarentum.[7] On Woodcotes Common are some earthworks, of which I give a somewhat more detailed account, as they present the appearance of British origin, whilst the relics found within them are Roman. I examined them in 1863. They consist of an irregularly-shaped area of about 80 paces diameter from N. to S., and about 100 from E. to W., surrounded by a low bank with a ditch on the outside. There appears to have been an entrance from the north, on each side of which is a comparatively high mound. Along the east side runs a *cursus* or avenue, which dies out towards the north in unintelligible banks, at about 200 paces. Towards the south-east, at a distance of 130 paces, it runs into an amphitheatre of 20 paces diameter, continues 150 paces further, and ends in irregular banks. The main

[7] See a Memoir by Mr. W. Shipp of Blandford, Transactions of the Arch. Assoc., Winchester Congress, p. 179.

work seems to have been a stockade of timber with a ditch, and the excavated earth thrown up against it, enclosing only one habitation of sufficient importance to leave any permanent trace. This was situated at the N. W. angle of the enclosure.

In my excavations at this spot I turned up many bones of red and roe deer, ox, boar, horse, and birds; also several ivory hair-pins, Roman coins, an amulet, fragment of an armilla, and portion of a dish, all of Kimmeridge coal, and several pieces of coal money; one of these was of especial interest, having been bored through the centre, and it showed three slight notches upon its circumference, for the purpose of attachment as a charm. Fragments of pottery were abundant, mostly from the kilns of the New Forest. In the ditch, abreast of this spot, in black earth, which showed it to have been two or three feet deep, I found similar relics, with the additions of an ear-ring, a ring set with an engraved piece of glass, two armillæ for children, a piece of coal money, and many oyster-shells. There were also portions of floor-bricks, many flat-headed nails, and several pieces of iron implements. There was also a quantity of fresco, on one side bearing white, black, and red colouring, on the other, impressions of sticks, upon which it had been plastered; hence the house was evidently of wood and wattles. Near was a carefully dug well, which appeared, from the smoothness of its sides, to have been at some time much used. I cleared out this only to the depth of twelve feet. At a short distance, was a small pond. On the north side of the enclosure was a bank, surrounding an oblong space of 25 paces by 9; within it I discovered no relics, except the fragments of a quern with some stones which may have formed its basement.

The amphitheatre, or whatever it may have been, is vulgarly called "Church Barrow." Though irrelevant to my subject, I may suggest the origin of this title. It is situated within a few hundred yards of the boundary between Dorset and Wilts. About twelve miles to the S. E., in the parish of Verwood, is a valley, in as wild a locality as can be well conceived, also very near to the county boundary. This is called "Wild Church Valley." Now it is recorded, that, in the times of persecution, in the reign of Queen Mary, the Gospellers, as they were designated, were wont to assemble

in out-of-the-way places, at the hazard of their lives, for the purpose of worship; and that they mostly chose spots near to the county boundaries, so that if they were disturbed in one county they might escape into the next.

About eight miles west of Woodcotes is Hod Hill, upon which is a Roman camp within British works, whence Mr. Durden of Blandford has obtained an unexampled collection of relics, and around have been discovered remains of several villas.[8]

It would be tedious to speak in detail of the numerous localities which afford evidence of Roman occupation. It is sufficient to say, that, with the exception of the low lands of the Vale of Blackmoor, which in Roman times was a forest, they abound throughout the county.

[8] Mr. Roach Smith has given an account of numerous relics found at Hod Hill; Journ. Brit. Arch. Ass., vol. iii. p. 94. By the courtesy also of Mr. Durden, they supplied an important accession to the stores of Dorset antiquities in the Museum formed during the meeting of the Institute at Dorchester in July, 1865. It may be acceptable to some of our readers to be reminded, in regard to the remains at Bittern, *Clausentum*, near Southampton, to which allusion is made in the foregoing memoir, that they are described in a valuable memoir by Mr. Roach Smith, Trans. Arch. Assoc., Winchester Meeting, p. 161.

Original Documents.

CHARTER OF QUEEN ELIZABETH TO THE HOSPITAL OF ST. LAWRENCE DE PONTEBOY, BODMIN, A.D. 1582.

PATENT ROLL 25 ELIZABETH, PART 9.

DE CONCESSIONE SIBI ET SUCCESSORIBUS PRO MAGISTRO, GUBERNATORE, FRATRIBUS ET SORORIBUS HOSPITALIS ELIZABETHE REGINE, SANCTI LAURENCII DE PONTEBOY IN COMITATU CORNUBIE.

ELIZABETH, &c. knowe yee that We, of our especiall grace, certen knowledge, and mere mocion, consideringe howe godly a thinge it is to releave the poore and such as are nedye, and especyally such as the hand of God hath visited with sicknes, in such sorte as without greate daunger to other of our subjectes they may not conveniently procure and gett there livelyhood; and beinge enformed that at a place called St. Lawrence de Pontboy, in the parish of Bodman, in our county of Cornewell, there hath bene of longe tyme a greate company of lazer people estemed by the name of pryor and brethren and systers, but never by us or any of our progenitors so incorporate;[1] and whereas dyverse persons of their charitable disposition have gyven unto the said leprous people dyverse landes and tenements by that name of corporacion, which they of longe tyme by cullour thereof enjoyed, and at this present therby mainteine the nomber of six and thirty leprouse people, to the great availe of all our subjectes inhabitinge theraboutes within our said County of Cornewell, We, to the end the said charitable acte may remaine inviolate and may not be defeated hereafter, but suche number of leprous people mainteined as heretofore hath byn, of our grace especiall, certeine knowledge, and mere mocion, for us, our heires and successors, doe gyve and graunt, and do by these presents notify and declare, that our will and intent is that the said lazer people, and all other which frome henceforthe shalbe in the said house called St. Lawrence de Pontboye in Bodman, shalbe called and knowen by the name of the Hospitall or Almeshouse of Elizabeth, Quene of England, of St. Lawrence de Ponteboy in the parishe of Bodman, and shall frome henceforthe for ever be and consiste of a Maister or Governor, and nyne and thyrtye poore men and women beinge leprous people; and we doe furder graunte for us, our heires and successors unto the said lazer people that they shalbe incorporate and made a body corporate for ever by the name of Maister or Governour, and the brethren and sisters of the said Hospitall, and to remaine and continue one bodye by that name incorporate for ever, and by that name shall and maye sue and be sued, and otherwise doe, performe and receyve all and everye other thinge that any bodye corporate maye doe, performe or

[1] Lysons observes that they are called by that name in a deed bearing date 29 Hen. VIII. Magna Brit., Cornwall, p. 36.

receyve; and also knowe ye that we have nominated, elected, and appoynted one Lewis Shessell to be the present and first Maister or Governour there, and that the rest of the poore people that are at this presente in and of the same laser howse shalbe the firste brethren and sisters there. And furder our will and plesure is that it shall frome tyme to time be in the free eleccion of the Maister or Governour, brethren, and sisters, lyvinge or remayninge, or of the moste parte of them, to make choise or eleccion frome tyme to tyme, as often as any of the brethren and sisters shall dye or departe the said Hospitall, to elect and chuse others in the place or steed of the person or persons soe dyenge and departinge the said Hospitall, to be of their corporacion and fellowship, so that the full nomber of fortye, and no more, be there contynuenge; and likewise upon the death or departure of every Master or Governour of the said Hospitall, that the brethren and sisters, or the moste parte of them remayninge, shall frome tyme to tyme make choyse of a newe Maister or Governour, and that suche choyse shall remayne good and stable, and the person so by them or the moste parte of them elected shalbe and continewe their Maister and Governour. And also the said Maister, brethren, and sisters shall twise every daye assemble themselves together and use suche prayers as are nowe appointed in the Churche of England, and shall in their said prayers pray for the prosperous estaite of us, our heires and successors. And furder we, of our especiall grace, certen knowledge, and mere mocion, for us, our heires and successors, do graunt and confirme unto the said Maister or Governour, brethren and sisters of Elizabeth, Quene of England, of St. Lawrence de Ponteboye in Cornewall, and to their successors, all that the mansyon howse de Ponteboy, alias St. Lawrence de Ponteboye, wherein the said lazer people nowe dwell, with thre farthinges land and twoe mylles, parcell of the possessyons nowe or lately belonginge, or reputed to be belonginge to the said lazer howse, wherof the one is scituate nere unto Benduye, with all water courses, leetes, libertyes and hereditamentes to the said mansion house, mylles and landes in any wise belonginge or apperteyninge; and also we, of our especiall grace, certaine knowledge, and meer mocion, doe furder gyve and graunt unto the said Master and Governor, brethren and sisters and to their successors, all that one farthinge land with all his rightes, members, and appurtenances which the said Hospitall sometime held of one Symon the sonne of one John Alcred, scituate, lyenge, and beinge in St. Lawrence aforesaid nere unto the said Hospitall, and which were lately also parcell or reputed parcell of the possessyons belonginge to the said lazer house, and one Faire to be kepte in a feild adioyninge to the said Hospitall, called the Faire feild or Faire close, and in other convenient places adjoyninge to the said Hospitall, lyenge without the towne of Bodman in the said County of Cornewall, everye yere for ever, to be kepte at the feaste of St. Lawrence by the space of thre dayes, that is to saye, on St. Lawrence eve, St. Lawrence day, and the morowe upon St. Lawrence daye, with all courtes of pypowders, proffitts, commodityes, incidents and advantages whatsoever to the said faire belonginge or appertaninge, or cominge, risinge or happening, for or by reason of the same.[2]

[2] Lysons states that James I. a few months after his accession, granted to the Hospital a weekly market on Wednesdays, and an annual fair, with a court of piepowder, on the festival of St. Luke. The market has been long discontinued, but the fair, for cattle, &c. held August 21, is still kept up; there is also another fair for cattle, at St. Lawrence, October 29 and 30. Magna Brit., Cornwall, p. 36.

And furdermore we, of our especiall grace, certen knowledg and meer mocion, for us, our heires and successors, do gyve and graunte by thes presents unto the said Master or Governor, brethren and sisters and their successors, all those twoe tenements and one garden with thappurtenances in St. Lawrence aforesaid, heretofore also parcell or reputed as parcell of the possessions belonginge to the said lazer howse, and are scituate, lyenge and beinge between the tenements of the heires of one John Beare, late of Pengelly deceased, of the northe parte, the greate ryver on the southe parte, and the moore of the heires of the said John Beare on the weste side, and the Quenes highway on the easte side, sometime in the tenure of one John Averye or of his assignes; and also all the mill of Pendewaye with the beade to the said myll belonginge, together with a smalle pece of enclosed land which lyeth betwene the water which descendeth from the said mill towardes the great water, on the North side, and the greate rocke where the water issuethe from the beade of the said myll, and extendeth downewardes towardes the greate water, on the Southe parte, heretofore also parcell, or reputed as parcell of the possessyons of the said lazer howse, and sometime in the tenure of one Thomas Trote or of his assignes; and also all thos twoe griste mylles, and one mesuage with thappurtenaunces in St. Lawrence aforesaid, late parcell also, or reputed as parcell of the possessyons of the said lazer howse, nowe in the tenure or occupacion of one John Balhatchett, Richard his wife,[3] and one James Sturgin, or of some or one of them, or of their or some or one of their assignes; and also all that one mesuage and garden with thappurtenances in St. Lawrence aforesaid, late parcell also, or reputed as parcell of the possessions of the said lazer howse, now, or of late, in the tenure or occupacion of Thomas Cleise, Christian his wife, and Thomas Cleise their sonne, or of some or one of them, or of their some or one of their assignes; and also that one howse and a garden in St. Lawrence afforesaid, late also parcell or reputed as parcell of the possessions of the said lazer howse, which Raife Cleise now or late held at the will of the said leprous people; and also that one howse, and a garden in St. Lawrence aforesaid, late parcell or reputed as parcell of the possessions of the said lazer howse, which one Alice Greybin now, or of late held of the said Hospitall at will; and also all that mesuage with all and singuler his rightes, members, and appurtenances in St. Lawrence aforesaid, late parcell or reputed as parcell of the possessions of the said lazer howse, nowe or of late in the tenure of John Lowe; and also all that one mesuage or tenement, with all his rightes, members, and appurtenances in St. Lawrence aforesaid, late also parcell, or reputed as parcell of the possessions of the said lazer howse, nowe, or late in the tenure of Richard Jenkin at the will of the said Hospitall; and also all that one mesuage or tenement in St. Lawrence aforesaid with all his rightes, members, and appurtenances late also parcell, or reputed as parcell of the possessions of the said lazer howse, now, or of late in the tenure or occupacion of William Rawe at the will of the said Hospitall; and also all that one mesuage or tenement with his appurtenances in St. Lawrence aforesaid, late also parcell, or reputed as parcell of the possessyons of the same lazer howse, now, or of late in the tenure, manurance, and occupacion of one John Kember at the will of the said Hospitall; and all that one mesuage or tenemente with his appurtenances in St. Lawrence aforesaid, late also

[3] *Sic* in the original.

parcell, or reputed as parcell of the possessions of the said lazer howse, now, or of late in the tenure, manurance, or occupacion of one John Renawden at the will of the said Hospitall; and also all that one chamber with his appurtenances in St. Lawrence aforesaid, parcell also or reputed as parcell of the possessions of the said lazer howse, nowe or of late in the tenure or occupacion of one Peter Nicholas, at the will of the said Hospitall; and all that one howse or mesuage in St. Lawrence aforesaid late also parcell or reputed as parcell of the possessions of the said lazer howse, now, or of late in the tenure of one Richard Piper at the will of the said Hospital; and also all that one tenement with his appurtenances in St. Lawrence aforesaid, late also parcell or reputed as parcell of the possessions of the said lazer howse, now, or of late in the tenure, manurance, or occupacion of one Johan Garland, widowe, at the will of the said Hospitall; and also all that one tenement with thappurtenances in Bodman aforesaid, late also parcell or reputed as parcell of the possessions of the said lazer howse, now, or of late in the tenure or occupacion of one Walter Hooper, at the will of the said Hospitall; and also all that annuall or yerely rent of twoe shillinges and eighte pence, yssuinge and goinge out of the landes and tenementes in St. Tingelly, now, or of late in the occupacion of Benedict Harry, late also beinge parcell, or reputed as parcell of the enheritance of the said lazer howse; to have and to hold all and singuler the said mansion howse, landes, tenementes, and hereditaments, mylles, faires, rents, revercions and services, and also all and singuler other the premisses, with the appurtenances, and everye parte and parcell therof, unto the said Master or Governor, brethren and sisters, of Elizabeth, Quene of England, of St. Lawrence de Ponteboye in Cornewall, and to their successors for ever, to the onely proper use and behoofe of the said Master, Governor, brethren and sisters, and their successors for ever, to be holden of us our heires and successors, as of our duchy of Cornewall, in free socage, and not in capite, by fealtye only, and suche yearly rents as heretofore have bene answered and payed for the same premisses or any parte therof, for all manner of services and demaundes; and we doe nevertheles ordeyne, will, and straightely command the said Master or Governor, brethren, and sisters of the said Hospitall, and their successors, that they, and their successors for ever shall provide and mainteine a good and convenient minister to say the divine service now used within the Churche of England, within the Chappell of the said lazer howse, and to minister the sacraments there, as heretofore in her majestyes tyme the same hathe moste commonly bene used. Provided alwaies neverthelesse, if at any tyme hereafter any controversy or suite shall happen to growe or be betwene the said Master or Governor, brethren and sisters of the said Hospitall, and any other person or persons, for, touchinge or concerninge any lease, or leases, estate or estates, heretofore maid, or pretended to be made, of any of the premises before by these presents graunted unto the said Master or Governor, brethren or sisters of the said Hospitall, and that informacion thereof be gyven, or complaint thereof made to the Lord Tresorer of England and the Chauncellor of the Exchequer, for the tyme beinge, if therupon the said Master or Governor, brethren and sisters of the said Hospitall, do not from time to time stand to observe, performe and keep such order and direccion as shall in that behalfe be made, taken, or sett downe by the same Lord Tresorer of England, and Chauncellor of the Exchequer, for the tyme beinge, that then, and frome thenceforthe, thes our letters patents for and

concerninge onely suche parte of the premises for the which the same order and direccion shall not be observed, performed or kepte, shalbe utterly void and of none effecte, anythinge before in thes presents conteyned to the contrary notwithstandinge.

In witnes wherof, &c., Witnesse our selfe at Westminster, the ninthe daye of Marche. [A. D. 1582.]

Per breve de privato sigillo, &c.

The foregoing Charter, or Letters Patent, has been already referred to by Professor Babington in an interesting notice of the Lazar House of St. Laurence de Ponteboy, in Cornwall, printed in the Journal of the Cambrian Archæological Association, vol ix., third series, p. 177. At the time of that publication, the writer had not found the original charter of incorporation, nor seen the enrolment of it in the Patent Rolls, of which the foregoing is a verbatim copy. We are indebted to Mr. Burtt for his friendly assistance in making search at the Record Office for the document, which we have thus been enabled to bring before our readers. The present affords a favorable opportunity of offering some observations on this ancient charity, and adverting to some other documents connected with its history and its subsequent dissolution in 1810.

Dr. Oliver, Monast. Dioc. Exon., p. 15, in a general notice of Chapels and Hospitals that existed in Bodmin, observes—"S. Laurence, of this house even Tanner knew little more than Leland, who calls it 'a pore hospital or lazar-house beyond the bridge, about a mile,' dedicated to S. Laurence.[4] Bishop Stafford, on Oct. 11, 1395, granted an indulgence 'ad sustentacionem pauperum leprosorum Sancti Laurencii juxta Bodminiam.' Again, in Lacy's Register, vol. iii. fol. 125, March, 5, 1435, is a similar indulgence to S. Laurence." These appear to be the earliest notices of the Hospital. No other record of its existence has come to my knowledge previously to that which is to be found on the certificates of colleges, hospitals, chantries, free chapels, &c., in the counties of England and Wales. An abridged copy of those relating to Cornwall and Devon is inserted in the Supplement to Dr. Oliver's Monasticon of the Diocese of Exeter, p. 483, under the head of "Chantry Rolls." The abstract, furnished at my request by my friend Mr. Cole, then one of the assistant keepers of public records at Carlton Ride, was supplied to Dr. Oliver as a contribution to his important edition of the Monasticon of that diocese.

The name of the founder in that report is left in blank, and that blank has never been supplied. At the date of the report (about 37 Henry VIII.), the charity is said to be for the maintenance of "nineteen Lazare peple, tow hole men, tow hole women, and one pryste, to mynystre unto them in a chappell adjoyning to the sayd hospital not farre distant from the paryshe churche;" the yearly value of the possessions is there stated to be £4 14*s.* 1½*d.*, and the value of the ornaments, jewels, plate, goods, and "catalls," to be 30*s.*

[4] Leland, Itin. vol. ii. f. 77. Compare also vol. iii. f. 2. "From Bodmyn to S. Laurence, wher a poor Hospital or Lazar House is, about a Mile. Here I passid over a Stone Bridge, and under it rennith a praty Broke that cummith out of the Hylles from South Este," &c. A marginal note supplies the following evidence of a benefactor to the Hospital:—"One of the Peverells gave a litle Annuite onto this House." The Peverels were the founders of the Grey Friars' Monastery Bodmin.

The next instrument is the above Charter of Elizabeth. It recites the existence for a long time past of a great company of lazar people by the name of "Prior, brethren, and sisters," at the place called St. Lawrence de Pontboy, in the parish of "Bodman," who had never therefore been incorporated by the Queen or her progenitors. The Charter then declares them to be a corporation by the name of the Hospital or Almshouse of Elizabeth Queen of England of St. Lawrence de "Ponteboy" in the parish of "Bodman." The number of lepers at the time of the charter is stated to be 36. By the new incorporation, the style of the body is to be "the master or governor, brethren, and sisters" of the Hospital, and there are to be in all forty persons;—viz. 39 "poor men and women, leprous people," and the master. The brethren are to be elected by the general body, and the master by the brethren and sisters. All the late possessions of the body specified therein are granted to the new body, to have and to hold to them and their successors for ever, of the Queen, her heirs and successors, "as of her Duchy of Cornwall—in free socage and not in capite." The choice of a minister to perform divine service in the chapel is vested in the new body.

For the results of this new incorporation, we have to obtain information from the proceedings in the Court of Chancery referred to in the memoir by Professor Babington. The original proceedings, and the decree, are among the records of that Court, but the official copies of the decree, and other orders, of the Court, in the possession of the local authorities at Truro, are no doubt authentic, and may be safely relied upon; and these testify that, at the date of the final order and decree, the whole establishment had degenerated into a disorderly pauper asylum, under no control, self-elected, and retaining no vestige of the original scope and object of the charity, as administered either before or under the charter of Elizabeth. The proceedings before the Master in Chancery show that there was not a single member of the body having any right or title to admission into the Hospital. The practice had been to sell annuities for lives, make leases, and grant undivided shares in the property and profits, to any one who was disposed to buy, and without the slightest apparent regard to the intention of the charity. The final decree annuls and cancels all the outstanding grants of this irregular character, and the charity in effect became extinct and incapable of re-establishment, for want of a full complement of leprous patients, and a competent elective body.

In the suits pending in Chancery, the object of the gentlemen who, in the name of the Attorney-General, instituted the proceedings, in 1803, was to obtain a transfer of the property to a hospital then lately established at Truro and supported only by voluntary contributions, and which had no special reference to leprosy or any one class of disorders.

On the other hand, it was contended that if the charity had wholly failed in its object, the corporation was in effect dissolved, and consequently its possessions had relapsed to the representatives of the original founders (if any could be found), or escheated to the Crown, or to the Duchy of Cornwall,—inasmuch as the tenure in the above charter is of the Crown *in right of the duchy*, then vested in the Crown. With regard to the duchy right (which, in the event of an escheat, would have been supported by the language of the charter), the Prince was made a party to the suit, and notified his personal assent to the scheme ultimately sanctioned by the Court. This "scheme" adopted partially the proposal of the gentle-

men who had promoted the suit; but, in conformity with the principle of *cy pres*, that is, of adhering, as nearly as possible, to the general intent of the founders, the Court exacted from the Managers of the County Hospital, as a condition of the transfer, an engagement to receive any patient of the class contemplated by them—namely, leprous patients. The words of the engagement were "that all leprous persons that may offer themselves for that purpose, shall (without any recommendation of a Governor) be admitted into the infirmary in preference to any other cases, and provided with proper treatment and accommodation in the infirmary, so long as their disorder may require."—13th August, 1810.

It is remarkable that shortly after the publication of Professor Babington's notice, an application was actually made by an eminent living physician to the officers of the infirmary to receive such a case of leprosy. I only mention this incident, because I have heard a friend and member of the Institute refer to it as a proof of the beneficial influence of archæological inquiries.

Let me add a word on the name of the original site of this Hospital. It lies at a short distance to the west of the church and town of Bodmin. A stream runs through the village or site of St. Laurence into the larger river that flows down to Padstow. The documents of the Hospital show that there were several mills belonging to it. Mr. Babington reads the name on the seal as "Penpoy," and sees in it a latent Cornish meaning, which he prefers to the reading in the charter. I suspect the seal, if rightly read, to be a blunder of the seal engraver, and that a wooden bridge at St. Laurence may have given name to the site of the "Mansyon howse de Ponteboy," as Twigood between Bodmin and Liskeard has given the name of "*Doubleboy*" to the Railway Station at that place. My Cornish friends in those parts feel no difficulty about this designation; and though I cannot undertake to say whether they will now see a bridge of wood, I think that if, on their next visit to Cornwall, my Cambro-British friends would bend their steps to the pretty bridge and beautiful woods of Dunmear and Pencarrow, they will at least thank me for having suggested so pleasant a stroll on a summer's evening.

EDWARD SMIRKE.

By the courtesy of the Cambrian Archæological Association we are enabled to place before our readers a representation of the seal of the dissolved Hospital of St. Laurence de Ponteboy, first published in their Journal in 1863.[5] The existence of the matrix appears to have been forgotten until the meeting of that Society in Cornwall in 1862; during a visit to Bodmin on that occasion the seal was shown in the Guildhall. Professor Babington, in his memoir before cited, observes that it is well deserving of a place in some permanent museum, and such suitable depository might, as we believe, be found either at Truro or at Penzance. He remarks that the seal is apparently the most ancient proof of the existence of the Hospital that is extant; the entries in the bishops' registers at Exeter, previously mentioned, had escaped his notice whilst compiling his interesting memoir. The matrix, as he supposes, was probably made in the fifteenth century, and even perhaps not long before the year 1500. We entirely agree in the conclusion expressed by our friend that the seal at the first aspect seems

[5] Archæologia Cambrensis, vol. ix., third series, p. 177.

much older than that period; and, whilst admitting the possibility that its somewhat unartistic design may have been due, in some degree, to its having been executed by some provincial workman in a remote district, the

Seal of the Hospital of St. Laurence of Penpoy, or Ponteboy, Bodmin. Original size.

fashion of the lettering, with certain other details, seem to suggest the inference that the seal may have been copied from a more ancient matrix. The device, as will be seen by the woodcut, is a figure of St. Laurence, holding a gridiron, and the Book of the Gospels, appropriate to his office of deacon. A cusped and crocketed canopy appears over the figure, and beneath is a small distorted figure kneeling in prayer, doubtless the prior of the hospital. The legend is—S' : LAVRENCII : BODMONS' DE : PENPOY.[6] The name Penpoy, as Professor Babington has truly pointed out, has a much more Cornish appearance than its form of Ponteboy, in the patent of Queen Elizabeth. He expresses the hope, in which we fully accord, that our Cornish friends may investigate the different forms of the name, and give us some explanation of the anomaly in the changes that it seems to have undergone.

I may notice, in conclusion, that the seal, as I am informed by Mr. Smirke, had been given by Lysons in the Supplementary Plates of Cornish Seals, rarely found in copies of the Magna Britannia. Its repetition (from the original), through the kindness of the Cambrian Association and of our friend Professor Babington, cannot fail to prove acceptable. I would also acknowledge my obligations to R. Bray, Esq., Town Clerk of Bodmin, and to Mr. Couch, of Penzance, for an impression from the matrix.

ALBERT WAY.

[6] The name of the place, it will be observed, has a mark of contraction over the last letter. It has been suggested that the word may perhaps be read Bodmonensis, *in extenso*. Mr. Smirke, however, proposes to read—Bodmonia.—The name was written with very arbitrary variation in spelling. The earliest form seems to have been Bodmon; we find Bodman, and Bodminian, frequently, and also Bodenham, even at a late time.

Proceedings at Meetings of the Royal Archaeological Institute.

March 1, 1867.

The Hon. W. O. Stanley, M.P. and V.P., in the Chair.

The gratifying intelligence was announced, in reference to the threatened demolition of a curious gateway at Tenby, which had been brought under the notice of the Institute, through a communication from Sir Gardner Wilkinson, at the previous meeting (see p. 79, *ante*), that the Corporation of that town had abandoned their intention to sacrifice the structure for an alleged purpose of public convenience. The remonstrance addressed to the Mayor on behalf of the Institute had accompanied resolutions expressive of the strong feeling of the Society of Antiquaries, the British Archæological Association, and of the Cambrian Archæological Society. The conservative efforts of several influential persons had also been united in the appeal, that happily had proved successful in the rescue of an interesting architectural relic.

A memoir on Wattlesborough Castle, Shropshire, by Mr. E. Blore, F.S.A., was read. It will be printed hereafter in this Journal.

The apparent difficulty as to the original entrance to the Castle, and other features in its construction, were the subjects of considerable remark. Sir T. Winnington, Bart., M.P., referred to the large earth-works on the south of Wattlesborough, and to the prevalence of castles and defensive houses in the neighbourhood of the Borders of Wales.

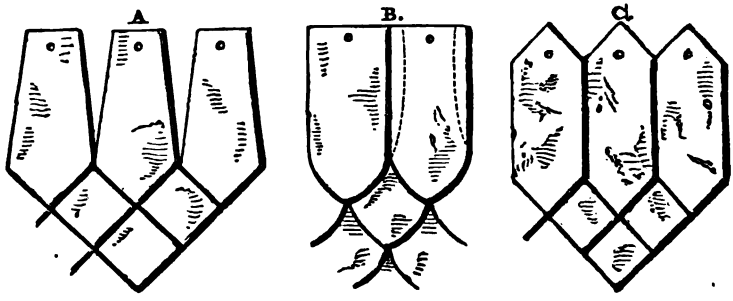
Mr. G. T. Clark thought that the remains at Wattlesborough had all the characteristics of a work of the Norman period, probably built upon Saxon foundations. The name was suggestive of Saxon operations. Shropshire had many earth-works and camps, but the keep was a distinct feature of the Norman period. Saxon work would not consist of more than simply dry walls connecting a camp with a castle. He had no doubt that the entrance was at the second story, of which he quoted several examples, among others the Castles of Rochester and Carnarvon. In this view the chairman and others concurred.

Mr. Yates observed that he had found evidences of a similar mode of entrance to castles in Germany, when investigating the line of the great Roman Wall.

This discussion was followed by some remarks on Stone Roof-tiles of Roman date, communicated by Professor Buckman, F.G.S., F.L.S.

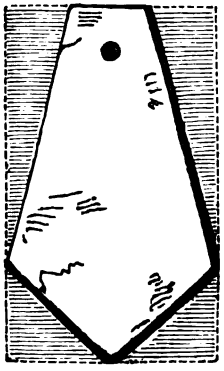
"During my excavations at *Corinium* I not unfrequently met with stone roof-tiles, in which the flat-headed clouted nails by which they were attached were occasionally found. These tiles, as might have been expected, were

made of materials found not far from the spot; thus, at Cirencester, those most commonly met with were made of the thinner slabs of the Forest Marble, a very heavy and coarse material for roofing, though it is employed for this purpose at the present time. Another rock which furnished roof-tiles is that of the fissile beds at the bottom of the Great Oolite, which, from having been used for roofing at Stonesfield, Oxfordshire, from time immemorial, is called 'Stonesfield Slate.'



A. Arrangement of Roman trapezoid tiles.
B. Modern imitation; the dotted lines show the effect of the Roman tile in diminishing the weight.
C. Oblong hexagonal tiles, commonly used in imitation of Roman roofing.

"The Forest Marble and Stonesfield Slate occur in the Cirencester district, so that it is easy to understand why these should have been used for roof-tiles in that locality, notwithstanding they were so heavy and coarse. The tiles made from these, as may be seen by specimens in the Cirencester Museum, are usually lozenge-shaped, so that when placed in position, they present a series of escallops. We occasionally see, likewise, a modern arrangement of stone tiles, in imitation of the ancient method.



Stone Roofing-tile; Bradford Abbas, Dorset.

"During my residence at Bradford Abbas, near Sherborne, Dorsetshire, I have been so fortunate as to detect several Roman sites; in one of these, on my own farm, an excavation exposed a couple of cart-loads (putt-loads, in Dorset dialect) of stone tiles; of some of the more perfect of these I send outlines, of their exact size and form. Before, however, I refer particularly to these points, I would describe the nature of the material. Bradford Abbas is situated on the Inferior Oolite and Fuller's Earth, but the first of these rocks is, there especially, too uneven in its fracture to become fissile, and the Fuller's Earth is not super-imposed by the Stonesfield Slate, as both this latter and the Great Oolite are absent in Dorset, whilst the Forest Marble, which is not far distant, is even rougher than that rock occurring near Cirencester.

"In this position, then, the builders employed a fissile bed from the basement strata of the lias of the adjoining county of Somerset. From this source, probably at Sparkford, a material was obtained, which,

though tolerably smooth on the surface, was yet, from its thickness (one inch) as heavy, if not more so, than the coaser tiles from the Forest Marble. The weight of a tile of the form and size of the pattern is ten pounds, but, if rectangular slabs were used, as most commonly at the present time, it would require to be nearly double that weight to effect the same purpose. (See woodcut.) In a modern imitation of the Roman escalloped tile the pointing of the bases has been devised in order to diminish the weight; the removal of the corners (as shown in the shaded portions of the woodcut) was obviously intended to effect the same purpose.

"If we arrange a series of tiles, as seen in the woodcut, fig. A., we can form some idea of the ingenuity shown in the manufacture of these liassic tiles, as illustrated by the Bradford Abbas examples. I feel persuaded that, simple as this matter might appear, this ancient method might be followed at the present day with considerable advantage.

"I would remark that the material of which these tiles were formed has been used for tesseræ in Roman pavements; it was, indeed, the occurrence of a number of these tesseræ in ploughed land, that induced the search which ended in the discovery upon which the foregoing remarks are been founded. I may observe that the making of both tiles and tesseræ was facilitated by the natural cleavage lines of the stone."

Mr. Octavius Morgan, M.P., and V.P., observed that the specimen exhibited was of remarkable form, ordinary Roman tiles of stone being diamond-shaped.

Mr. J. Yates alluded to the considerable discovery of Roman tiles at Caerwent, of which Mr. Morgan had given a detailed account, and to the circumstance of such tiles being found only in the West of England, the country of the Boduni, who were tilers. In illustration of his remarks, Mr. Yates exhibited one of the more ordinary forms of such tiles. It had been found among the ruins of the Roman villa at Coker near Yeovil in Somersetshire. It has the hole for a nail with a broad head, and consists of a fissile calcareous sandstone; the form is an elongated hexagon.

Mr. Yates has since given references to the following additional examples, all from Roman buildings and all, except Wroxeter, from the South-Western counties, the country of the ancient Belgæ. The localities and the authorities for them are as follows:—

1. Wroxeter, Shropshire.—Mr. Thomas Wright, F.S.A., observes,—"I will mention as another peculiarity, that the houses seem generally to have been roofed with micaceous slate, set lozenge-shaped, so that from a distance, when seen in the sunshine, the Roman city must have glittered like a city of diamonds, such as are sometimes described in Eastern romance." These tiles are hexagonal, with the iron nails remaining in some. Specimens are in the Museum at Shrewsbury.—"Times," March 24, 1859.

2. Caerwent, Monmouthshire.—In exploring the site of a building, which had evidently been a dwelling-house, "large flat-headed iron nails were found among the rubbish . . . . and several roofing-tiles of the form of a hexagon, made of the slaty sandstone of the district, called tile-stone. They at once explained the meaning of the flat-headed nails already noticed." Octavius Morgan, Esq., M.P., Excavations within the Walls of Caerwent, Archæologia, vol. xxxvi. p. 418; published also by the Caerleon Archæological Society, pp. 16, 17.

3. Woodchester, Gloucestershire.—Lysons' Roman Antiquities of Woodchester, pl. xxviii. fig. 6.

4. Bisley, Gloucestershire.—"Hexagonal tiles, in which were found inserted the iron nails, by which they had been fastened." Dimensions, 14 in. by 9½. Archæol. Journal, vol. ii. p. 43, 44. The supposed arrangement of the tiles is there shown by a woodcut.

5. Cirencester, Gloucestershire.—"The roofs of the houses appear to have been made of the fissile stone of the district." Buckman's *Corinium*, p. 24. Specimen in the Museum at Cirencester, of the usual form, with a hole drilled for the nail.

6. Wellow, Somersetshire.—Dimensions of the hexagonal tiles, 18 in. by 11. With these were found coping-stones of freestone, from 2 to 3 ft. in length. Rev. John Skinner, plates and description; Rev. H. M. Scarth, Aquæ Solis, p. 112.

7. Uplyme, Devon, adjoining Somerset.—"Roofing-tiles of uniform size, the form being in this instance an irregular pentagon." Archæol. Journal, vol. xi. p. 49, 50.

8. North Wraxhall, Wiltshire.—"The stone tiles were neatly cut into the form of elongated hexagons, and the roof composed of them must have presented a handsome and ornamental appearance. The iron nails with which these tiles were fastened to the rafters, generally remained in the holes drilled through their upper angles. Very strong timber must have been needed to carry such a roof, the tiles averaging in weight at least 5 lbs. They measured about a foot in width, and 18 in. in length. . . . . The roofs were topped by a ridge crest of stone hollowed out, each piece fitting into its neighbour like the modern drain pipes." G. Poulett Scrope, Esq., M.P. Wiltshire Archæol. Society's Magazine, 1860.

9—10. Carisbrooke, and Gurnard Bay, Isle of Wight.—Hexagonal "roofing-stones," with remains of nails and holes for them. Rev. Edmund Kell, Journal British Archæol. Association, Dec. 1866, pp. 2, 3, pl. 23, fig. 1—3.

11. "Castle Field," 1½ miles from Andover, Hampshire, the site of *Vindonum*.—Tiles hexagonal, 16 in. long, 11 or 12 in. broad, nearly an inch thick, with holes for nails. Discovered in May, 1867, by the Rev. E. Kell.

Mr. Albert Way offered the following observations on the monumental effigies of the Plantagenets in the conventual church at Fontevrault, especially in reference to the rumour of their proposed removal to this country, and the excitement which such a rumour was said to have produced in France.

"The remarkable statement that appeared in the 'Times' of Friday last, the 22nd ult., relating to the memorials of the Plantagenets that exist in the abbey church of Fontevrault, has doubtless not escaped the notice of the members of the Institute. It relates to the proposed removal of the effigies in question to this country; their highly interesting character is known to us by the accurate etchings published by Charles Stothard; and, more generally, by the admirable facsimile casts in the Mediæval Court at the Crystal Palace. Independently of the historical interest of the statues, their value as early examples in the series of works of monumental sculpture is indisputable. I may be permitted possibly to advert to this subject the more urgently, having had the satisfaction of examining these effigies at Fontevrault in 1825, several years before their removal by Louis Philippe, and the 'restorations' and elaborate embellishments that they had undergone in the *ateliers* at Versailles, where it was the intention of

that sovereign, as I believe, that the renovated statues of the Plantagenets should grace the historical galleries formed by his direction. The acquisition of these remarkable portraitures has on more than one occasion been coveted in this country, and especially last year was the desire expressed on occasion of the influential meeting that took place to give furtherance to the project of restoration of the Chapter-house at Westminster Abbey, where it was suggested that a suitable depository might be found for the Plantagenet memorials, in the event that an *entente cordiale* could be attained with our allies of France for the removal.

"I am not aware that any rumour of negotiations for this object has obtained publicity in this country, and it is with the view of inviting inquiry that I would bring the announcement to which I have alluded under the special notice of the meeting of the Institute. The statement was given by the Paris correspondent of the 'Times,' as follows:—

"'M. Beulé, of the Institute of France, has written to the *Débats* a letter on behalf of the Scientific and Artistical Society of Angers, to protest against the contemplated delivery to the English Government of the statues of the Plantagenets in the chapel of the prison at Fontevrault. He relates that on the 8th instant an agent of the French Government arrived there to remove the four statues of Henry II. and Richard Cœur de Lion, Eleanor of Guienne and Isabel of Angoulême. The director of the establishment, however, affirming that the order presented was informal, refused to deliver up the relics. The writer states that the agitation throughout the ancient province is intense, and that the prefect, the bishop, the mayors of towns, and several learned bodies have forwarded petitions to the Emperor against the proposed removal. He also declares that the statues belong not only to Anjou, but to the whole of France, and should not be given up to England without a Bill passed by the Legislative Body. M. Beulé adds that applications from the English Government were refused by the Restoration in 1817, and again under Louis Philippe. That sovereign, he says, removed the relics to Versailles, and placed them in the National Museum, in order to discourage any idea on the part of England of obtaining them; and it was the President of the Republic who in 1849 acceded to the earnest wishes of the people of Anjou, and caused the effigies to be replaced in a chapel of the ancient church at Fontevrault.'

"Opinions may doubtless vary in regard to the removal of the statues from the place with which their interest is so essentially connected. But my immediate object is to ascertain whether any negotiations have actually been commenced; and the subject cannot fail to be of general interest to archæologists in this country."

The Chairman and Mr. Morgan were certainly of opinion that the Plantagenet effigies ought not to be removed from Fontevrault. In this expression of opinion several other members joined, it being urged that the monuments were now in their proper place, as the sovereigns of England were the Dukes of Anjou, of whom Fontevrault was the burial-place; the removal of those effigies to this country would not be in accordance with proper principles for the local conservation of historical monuments. At the same time, it might be very desirable to direct examination to be made with regard to their condition in their present place of deposit.

In the absence of any precise information as to the actual state of the facts, the Chairman was requested to ask a question of her Majesty's Secretary of State for Foreign Affairs, in the House of Commons; and if

the effigies, as stated, were about to be removed to this country, the officers of the Institute were directed to draw up a resolution in accordance with the previously expressed opinions, and to arrange with the Chairman for its presentation in the proper quarter.

Mr. J. Death transmitted some "Remarks on a portion of the Drainage in connection with the Abbey of Waltham," describing an hour's ramble through those underground passages, undertaken to test a tradition which existed in the neighbourhood, that they led to a subterranean building containing images and objects of sculpture. Of course the search for such a building was fruitless; but it enabled the writer to map out the course taken by the drains, and to examine their construction and form. A map of the drainage was exhibited; it showed some curious details in such works.

Antiquities and Works of Art Exhibited.

By the Rev. J. Beck.—Two camp-kettles of white or tinned(?) metal, and of German work, lately acquired in Sweden. They were probably of the seventeenth century; one of them was part of the spoil of the Thirty Years' War carried off by the army of Gustavus Adolphus. They were somewhat roughly but quaintly ornamented, and their contrivances for the simultaneous cooking of various articles of food were ingenious and remarkable.

By the Hon. W. Owen Stanley, M.P.—Fragments of a fine vase of the British period found at *Heriri Mons* (Merioneth), in which were fragments of bones and a wooden needle or bodkin. This relic and the urn are figured in this Journal, p. 16, *ante*. Mr. Stanley related the circumstances attending this discovery; and the subject of ancient interments in that part of our island has since been completely commented upon by him in a memoir printed in this volume (p. 13).—A Roman lamp, with the stamp of the maker "fortis"; a Roman ring of gold, from which the stone had been lost; and a metal *plaque*, of the seventeenth century (?), the profile of a Roman lady. These had been found at *Segontium* (Carnarvon).

By Mr. J. Yates.—A Roman roof-tile, of stone, from Coker, near Yeovil, Somerset. See p. 181, *ante*.

By Sir Thomas Winnington, Bart., M.P.—A watch which formerly belonged to Mr. Speaker Onslow, and which had been used by the Speakers of the House of Commons till within the last thirty years.

April 5.

The Hon. W. O. Stanley, M.P. and V.P., in the Chair.

The Chairman reported the result of his enquiries in the House of Commons as to the facts respecting the effigies of early sovereigns of England at Fontevrault. In answer to his first question Her Majesty's Secretary of State for Foreign Affairs replied, that representations had been made to His Majesty the Emperor of the French that these monuments were in a very neglected condition, and that their removal to this country was greatly to be desired. His Majesty, with that respect for our wishes that had always characterised his dealings with this country, had thereupon offered the effigies to Her Majesty the Queen. The offer had been accepted, and arrangements were in progress for their speedy transmission to this country, if they were not now *en route*. Since that answer was given—an answer which seemed to prevent any action being taken by the Institute in the matter—it had doubtless come to the ears of Her Ma-

jesty's government that many persons, whose opinion was entitled to the greatest respect, thought that such a removal is inexpedient for considerations which had been so fully urged at the last meeting of the Institute. On the other side of the Channel also, the feeling which Mr. Albert Way referred to in the remarks which had first brought the subject to the notice of the Institute, had increased so considerably that quite an excitement had arisen in the country, and protests, memorials, and representations of various kinds had been made to the government of the Emperor against the proposed transfer of the effigies. Under these altered circumstances he (the Chairman) had again interrogated Her Majesty's Secretary of State as to their perseverance in the wish to bring over those monuments to England, and Lord Stanley had replied that it had been represented to the Emperor that the Queen was quite willing to release His Majesty from the offer he had made, if he thought fit to re-consider it. At the same time it was suggested that attention should be given both to the condition of the monuments themselves, and to the place in which they were now deposited. And thus the wishes of the Institute, as expressed in the resolution passed at their last meeting, were to be carried out.

The Rev. G. MUSGRAVE exhibited drawings which he had lately made of the effigies, and spoke of the general excitement which had been produced in France by the suggestion of their removal to this country.

Mr. O. MORGAN, M.P., had already expressed the opinion that we had no claim to these statues. Though Kings of England, the Princes they represented were Counts of Anjou, and their bones rested at Fontevrault,—their own proper burial-place. The feeling of desire for their possession by this country had been owing to their neglected condition, and the action taken by the Institute had produced a good effect if it ensured the better care and preservation of the monuments. In any "restoration" that might be made he trusted it would not be carried too far, as more serious injury might be done by that course than by the most extreme neglect.

Dr. ROCK was sure that he should express the feeling of those present in thanking the Chairman for the delicacy and tact which he had shown in this matter, and which had been the main cause of the good result that had been achieved. These statues had been long neglected at Fontevrault, and "*perfide Albion*" had the honour of preserving the effigies in the place to which they belonged.

Mr. C. TUCKER gave an account of the discovery of some remarkable bronze weapons in Devonshire, and exhibited several of the objects found. The discovery was made in the course of some draining operations in the parish of Talaton, near the Roman "Via Strata" leading from Moridunum to Exeter, and not far from the large earthwork known as Hembury Fort. Mr. Tucker pointed out the remarkable features presented by these objects, but he has since extended those remarks so as to embrace references to similar objects. His memoir is printed at length at p. 110 of this volume.

The Rev. J. BECK gave the following account of his acquisition of a considerable number of articles for table use (chiefly of silver) and personal ornaments, in the North of Europe during the course of last year:—"We sailed to the N.W. extremity of the Gulf of Bothnia to the town of Luleå, when we ascended the Great Luleå river to Storbacken in a north-westerly direction; then by land in the country carts to Jockmock, and by boats up a series of inland lakes to the settlement of Quickjock, the extreme settle-

ment in the north-western part of the province of Luleå Lappmark, and situated within the Arctic Circle. The government has long attempted to settle the country by granting tracts of land to persons from the South, and excusing them from all taxes, military conscription, &c. The Lapps come down to these settlements during the winter, and as soon as the snow melts hasten to the high fells in order to avoid the mosquitoes, which breed in vast quantities in the valley swamps. I observed the Lapps wearing silver buttons of a very mediæval pattern on their belts and coats—a long, heavy cloth coat encircled by a silver belt worn as the mediæval belts were, and showing a waistcoat with a high straight collar, ornamented with globular buttons, to which pendants were attached. Down either side of the waistcoat were six large buttons of a very mediæval type. Their caps are high and conical, with bands of silver or tin wire. The spoons are of a very peculiar type, some of silver, others of horn and wood. Their drinking cups are mostly two-handled, with pendants attached, resembling a Scotch *quaigh*. In the settlers' houses we found large silver beakers, several of which I brought away.

"In other parts of Sweden and in Norway the personal ornaments, in almost all cases the handiwork of the peasants, exhibit a strong Oriental type, which may easily be accounted for by the fact that the Northmen, the Väringer, as they were called, repaired to Byzantium, and took service in the Emperor's body guard (Thoms' Primæval Antiquities, p. 68), and on their return home they would naturally bring their ornaments back with them. The specimens I now have were obtained from the peasantry themselves, and are very different in their make to such as may be purchased of the silversmiths and jewellers in the different towns."

Remarks upon several of the articles were made by Mr. J. YATES and other members present.

The CHAIRMAN described the circumstances attending the finding of a small perforated urn of remarkable type at Bryn Seiont, Carnarvonshire, and which was exhibited by him by kind permission of the Rev. W. Wynne Williams, of Menaifron. See p. 22, *ante*. It had been enclosed in a larger urn of coarse half-baked material containing burnt bones. The subject of the early interments in North Wales and the Isle of Anglesey of which this and other urns are the evidence, has been carefully considered by Mr. Stanley, and the result has been the interesting memoir upon the subject which appears in this volume.

Antiquities and Works of Art Exhibited.

By Mr. E. WATERTON, F.S.A.—A small collection of badges, ornaments, enamels, and jewels.—Modern Greek Ornament, enclosing a wooden cross such as are made at Mount Athos.—German Badge, with figure of the Crucifixion on both sides;—seventeenth century.—A small figure of silver, with armour formed of a pearl, brought from Walton many years ago; presumed to be intended for Sir Adrian Fortescue, knight of Malta, who was martyred, under Henry VIII., in 1541, and whose portrait at Malta somewhat resembles the figure.—Miniature of St. Joseph nursing our Lord. It is in an enameled filagree setting;—seventeenth century; from Sicily.—Enameled Cross, set with pearls, and garnets, and crystals; modern Greek.—Gold Enameled Crucifix;—sixteenth century.—Large onyx cameo

of the Blessed Virgin and Child, in an enameled setting; behind is an enamel of the Immaculate Conception.—Jewel of the Order of Christ of Rome, in diamonds;—early sixteenth century.—Madonna and Child, of turquoise cameo;—seventeenth century. Setting modern.—Small enameled Badge; the figure of a deer *couchant*; the body of a pearl.—Small rosewood carving, on one side the Madonna and Child, on reverse the Veronica, in a gold enameled setting.—An old copper gilt and enameled Cross of a Knight of St. John of Jerusalem. Date about 1600.—An *enseigne*—the figure of a talbot *marchant*, the whole adorned with rubies, emeralds, and pearls; early seventeenth century.—A pectoral Cross, enameled, and adorned with rubies and pearls.

By the Rev. J. Beck.—A collection of silver plate, and table utensils, together with personal ornaments, from the North of Europe.

By Mr. W. F. Vernon. A small collection of rings, seals, &c., belonging to Major-General Moore, as follows:—Impression of a seal representing Lake Moeris.—A brooch and three unset stones, one a very beautiful Bacchantic head (Cinque-cento).—Five rings.—Seven rings with original setting, and two with the setting broken.—Two Rings, and five unset stones (Gnostic).—A Roman mask unset.—A Scarabeus and three Assyrian cylinders, engraved.—Four seals.—A Saxon fibula of silver.—Ten Bronze rings and a fibula found at Bath.

Archaeological Intelligence.

It has been determined, in accordance with the cordial invitation from the Corporation of Lancaster, with promise also of co-operation by persons of influence in the county, that the Annual Meeting of the Institute in 1868 should be held in Lancashire. Those who feel interest in the proposed visit to a district replete with ancient remains, British and Roman, and especially with examples of conventual, military, and domestic architecture, are requested to communicate with Edmund Sharpe, Esq., The Higher Greaves, Lancaster. It is anticipated that the Great Exhibition next summer at Leeds, under direction of Mr. Waring, with which it is proposed to combine illustrations of the History of Art, ancient and modern, and also a Special Series of Portraits of "Yorkshire Worthies," the arrangement of which is confided to the able hands of Mr. Hailstone, cannot fail to present additional attractions to the archæological visitors who may attend our Congress in the adjacent county.

Our readers will learn with satisfaction that the "Memorials of Westminster Abbey," by the Dean of Westminster, will be forthwith published. On occasion of the Meeting of the Institute, in London, July, 1866, the Dean, President of the Historical Section, most kindly consented to give certain portions of the valuable materials in preparation for his work previously announced by Mr. Murray. The Discourses delivered at our Meeting in the Metropolis have been noticed in this Journal, vol. xxiii., pp. 309, 313.

NOTE ON THE RESTORATION OF THE LAOCOON.[1]

Accounts vary greatly as to the restorer of the arm. Vasari states that Bandinelli, when making his copy of the group (finished in 1525) now in the Galleria, Florence, "also restored the antique Laocoon in the right arm, the which being broken off and never found, Baccio made one in *wax*, the full size, that corresponded with the muscles, and with the boldness and character of the original, and united with it in such a manner as to prove how well Baccio understood his profession; and this model served him for making the perfect arm of his own work" (Vita di Baccio Bandinelli). But Winckelmann (H. A. x. 1, § 13), has the following account of the restoration:—"The right arm of Laocoon, which was wanting and replaced by one of *terra-cotta*, M. Angelo formerly thought of restoring, and commenced cutting it out of marble in the roughest way possible, but never finished it: this piece therefore now lies under the statue. This arm, entwined with the serpents, would have bent itself on high over the head of the statue. . . . . *Bernini* has, on the contrary, stretched out the arm restored by him in terra-cotta, in order to leave the head of the figure free, and that no other portion might approach the same in an upward direction."

It must, however, be observed here that, had M. Angelo attempted the restoration, it could not possibly have escaped the knowledge, and the chronicling, of his devoted admirer, Vasari.

Winckelmann must certainly be confounding the great *Michele* with his obscure friend *Giovanni Angelo Montorsoli*, who is actually mentioned by Vasari (Vita di G. Ang. Montorsoli) as having "restored the left arm, that was wanting, of the Apollo, and the *right of the Laocoon*," for Clement VII.

But, whether well-grounded or not, the tradition proves his idea of the proper action of the arm to have been equally wide of the original as what we see at present, whether that be due to Bandinelli or to Bernini.

CORRECTION.

In the Memoir on a seal of the Prior of Tywardreth, set with an intaglio of the Laocoon group, p. 49, line 7, *ante*, for *neck*, read *head*.

[1] See p. 48, *ante*.

Gold Cup found in a Barrow in Rillaton Manor, Cornwall.

Now preserved at Osborne. Height 3¼ in., diameter at the mouth 3⅜ in.

The bottom of the Cup, showing the terminal corrugations, as seen from below, and the central knob.

Exhibited by permission of the Queen, and of the Prince of Wales, at a meeting of the Royal Archæological Institute, June 7, 1867.

The Archaeological Journal.

SEPTEMBER, 1867.

SOME ACCOUNT OF THE DISCOVERY OF A GOLD CUP IN A BARROW IN CORNWALL, A.D. 1837.

By EDWARD SMIRKE, Vice-Warden of the Stannaries.

It gives me great pleasure to avail myself of the gracious permission of Her Majesty, and of His Royal Highness the Duke of Cornwall, to submit to the inspection of this Society a remarkable cup of gold which was disinterred from a barrow or tumulus of earth, as long ago as the spring of 1837, on the waste of the Duchy manor of Rillaton, in Cornwall.

I have a perfect recollection of the discovery, having been at that time in frequent communication with certain officers of the duchy, who kindly described to me the circumstances under which the cup was found.

I have since also personally received from one of those officers, Mr. George Freeth, of Duporth, in Cornwall, a full confirmation, from his own knowledge, of the contemporaneous statement of the then mineral agent of the Duchy, Mr. Colenso, who was instructed by the late auditor, Sir George Harrison, to make careful inquiries on the spot and to embody the result in a written statement of facts.

The information so obtained is entirely worthy of reliance. It was contained in three letters written on the 10th, 19th, and 20th of May, 1837, of which this paper may be taken as a fair abstract.

Shortly before that time, some labourers, in search of stone for building an engine-house on a mine on the manor, thought they could more easily obtain some from a large mound of earth and stones which had been standing from time immemorial, with three others, on a part of the moor

about half a mile from the well-known masses of granite locally called the "Cheese-wring."

The mound or barrow was about thirty yards in diameter. After removing part of the superincumbent earth and stones, they came upon a vault or cist of rough masonry forming an oblong four-sided cavity, consisting of three vertical stones on each of the longer sides, of one stone at each end, a large flat one below, and a large flat covering stone above. The length of the whole vault was 8 ft., the breadth 3½ ft., and the height about 3 ft.

None of these granite blocks had any visible tool-mark on them; but they were regularly arranged, the upper stone being about 5 ft. below the surface of the mound. The vault extended in length from N. N. E. to S. S. W. In the opinion of Mr. Colenso, the mound had been already disturbed, and the central part of it had been thereby somewhat depressed; but I do not understand from this that the vault or cist itself had been apparently disturbed; on the contrary, a sketch by Mr. Freeth represents both the horizontal and vertical stones as in their proper position.

At the northern end of the vault were found human remains, consisting of the crumbling portions of a skull and other bones almost pulverised.

Within the vault, and about 3½ ft. from this north end, were found two vessels lying near each other, one being of earthenware, the other and smaller one being the gold cup before us.

When first observed, there was a small flat stone, about 16 in. square, leaning diagonally against the inner west side of the cist, apparently (as my informant suggests) for protection of the vessels, of which the earthen vessel was unfortunately broken by the tool used in disengaging it from this stone.

Mr. Colenso states in his letter that the earthen vase must, in his opinion, originally have contained the gold one, which probably fell out of it when the larger earthen one was broken; but neither he nor Mr. Freeth saw the two *in situ* in the vault; so that the opinion was founded on the description of the workmen.

Some other articles were also found in the cist, and were sent up to London with the cup, but they are not now forthcoming. This is to be regretted; for, on the old

principle of "*noscitur a socio*," these other relics, found in company with the cup, might have thrown light on the age or date of the cup. They were however seen by Mr. Freeth, now the only attesting witness of their nature and aspect. They were sent up in four packages or boxes, containing the following articles, as described in the letter accompanying them, viz., portions of the fictile vessel called by the writer the "urn;" a small bit of "ornamental earthen ware;" something like a metallic "rivet," and other undescribed articles, as well as small portions of the human bones already mentioned. With these were also enclosed what remained of a certain spear-head or sword blade, which was about 10 in. long when first seen in the vault, but was afterwards broken by removal.

The cup was forthwith sent to King William IV. by Sir George Harrison; but the demise of his Majesty within a week or two afterwards will sufficiently account for the temporary disappearance of the treasure. In all probability the contents of the boxes were not sent to the Palace with the cup. Sir George himself did not long survive, and my friend Mr. Freeth's memory is now the sole depository of the secret of those lost relics. He speaks of them with a natural distrust of his recollection after an interval of thirty years, and in relation to objects at that time, in themselves, of little ostensible interest. He remembers the fragments of metal, and of the blade; and also the fragments of pottery, of a "reddish brown" color; and he has some recollection of some pieces of ivory, and of a few glass beads.

Such is all that I can offer to supply the place of the miscellaneous contents of the cist, other than the cup, which has alone been preserved for our gratification and instruction.

In order further to identify this cup, you will bear in mind the accession of our Queen, and her subsequent marriage,—events of such engrossing importance as to leave little room for thought or inquiries about the cup. It is easy to understand that the discernment of the Prince Consort distinguished this golden spoil, at a subsequent period, from other royal plate. The record of its finding was brought to light and annexed to the relic; and it now has its place of deposit, at the wish of his Royal Highness, in the Swiss Cottage of the Queen at Osborne.

This highly curious cup,—so far as I am aware, unique,—

measures in height 3¼ in.; diameter at the mouth 3⅜ in.; at the widest part of the bowl 3½ in. The handle measures 1½ in. by ⅞ in., greatest width. The weight of the cup is 2 oz. 10 dwts.; its bullion value about £10. The handle, which has been a little crushed, is attached by six little rivets, three at the top and three at the bottom, secured by small lozenge-shaped nuts or collars. This appendage, it should be observed, seems, at least in its present state, fit only for a means of suspension, barely affording sufficient space for the smallest of fingers to be passed through it. Indeed, the cup does not stand firmly on its base, and I have doubts whether it was intended to do so. On the bottom of the cup there are concentric ribs or corrugations, like those on the rest of it, around a little central knob about ¼ in. in diameter. Thus the corrugated fashion of work extends over the entire surface. The prevalence of this corrugation in early gold ornaments may have been caused by some constructive advantage; as we see in the frequent use, in our own times, of thin wavy sheets of metal for temporary and other buildings, whereby a greater degree of strength is obtained, with economy of metal. This, in objects of gold, would of course be a cogent consideration.

With regard to the mode of manufacture of such a cup, I have had the advantage of obtaining the valuable opinion of Messrs. Garrard, who carefully examined and weighed it. They found in it no sign of solder, or any rivet used except for attaching the handle; and they considered that a like cup, of the same material, might be produced without difficulty out of a single flat lamina of thin gold, hammered or beaten into a similar form. They recognised it, immediately, as belonging to a type of Scandinavian antiquities that had occasionally been brought under their notice. I mention this, because some practical gentlemen, to whom I showed it last summer, considered the workmanship to be of a character which it would not be easy to reproduce without a mould.

Since the re-discovery of this very remarkable treasure-trove, I have looked in vain for any like cup, of the same material, to which so early a date can be assigned (at least since the well-known prize won by the valiant "Carodac!"); and have been kindly aided in my search by friends more learned than myself in the history of such art. Mr. Way has pointed out to my notice a cup of amber, of a character

not dissimilar, found near Brighton several years ago. It was found in connection with remains of a so-called Keltic character, and is figured in the Sussex Archæological Transactions, and also in this Journal, vol. xv., p. 90. The small handle has some resemblance to that of the present cup, but the material distinguishes the two. The *general* outline or form of the gold cup is by no means rare, and might find a type in more than one period of early art, especially in fictile ware. I observed several such earthenware vases, from Boulogne, in the late Paris Exhibition, in the inner circle, which might pass for fac-similes of the present cup (except the handle), with like annular horizontal undulations of the surface.

Gold armlet found at Cuxwold, Lincolnshire.

There is an armlet, found in Lincolnshire (already published in this Journal, and of which the representation is here reproduced), which, both in respect of material and of workmanship, might be a counterpart of the cup, but for its application to the purposes of a personal ornament, instead of a cup. Indeed the corrugation of thin gold seems to be a mode of metallurgy that has been resorted to in various analogous objects in that metal, which have been referred to as early, or Keltic manufacture, quite unconnected with Phœnician, Roman, or Saxon work: such as is the gold corslet found at Mold, in Flintshire, which is now in the British Museum,[1] together with some other small

[1] This remarkable relic is figured in the Archæologia, vol. xxvi. p. 422, and in Archaeol. Journal, vol. xiv. p. 292.

portions of like sulcated, or punched laminæ of gold in the same glass case with the corslet. The diadems, or gorgets, of gold, figured in Sir W. R. Wilde's Catalogue of the Gold Antiquities in the Museum of the Royal Irish Academy,[2] also afford examples of a like treatment of gold laminæ for the purposes either of ornament or of increased strength. For the latter purpose, those who have observed the growth of shells of deep-sea mollusks, must recollect how often the like purpose of protecting their brittle envelopes seems to be effected by annular folds or corrugations of the outer material.

But I will not further pursue this consideration, in the hope that my friend, Mr. Way, who can speak *ex tripode archæologico* on the subject of English gold-finds, may be tempted to give us the benefit of his own observations *in subsidium* to the present imperfect references.

One of the letters of Mr. Colenso above referred to, calls the attention of his correspondents to the three other untouched tumuli, adjacent to the one in which the cup was discovered; and suggests that what the miners call a *cross cut* might be productive of further discoveries of interest in that unexplored ground. As yet I have not heard whether this useful hint has awakened the curiosity of our Cornish co-adventurers in this field of metallifodine enterprise. Considering that this Northern district has already produced the lunettes of Padstow and of St. Juliot, to say nothing of the lost μανιάκης or στρεπτόν of Looe Down, of which I reminded my Cornish friends in October, 1866,[3] I cannot forbear to hope that they will find out some "Stannary process" for facilitating the exploration of the other Rillaton tumuli.

I cannot refrain from mentioning here, that, during the presidency of the Prince Consort over the Duchy Council, an incident occurred which may supply a laudable example to lords of manors elsewhere. When an application was made, in my own recollection, by the contractors of some great works near Plymouth for a lease or liberty to quarry granite, at a tonnage or royalty, in Rillaton manor, the council prohibited the removal or quarrying of any within a certain prescribed distance from the Cheese-wring. That colossal pile of tabular slabs of rock, whether visited as a

[2] See especially the ornaments figured, ibid. pp. 22, 23, and 24.
[3] Journal of the Royal Institution of Cornwall, vol. ii. pp. 138, 139.

geological phenomenon; or as a picturesque object; or as a Druidical altar or idol according to the more favourite local opinion, standing in the midst of the Caradon copper mine district a few miles north of Liskeard, has thus been protected from demolition.

SUPPLEMENTARY NOTICES, RELATING TO A GOLD CUP FOUND IN A SEPULCHRAL CIST NEAR THE CHEESE-WRING, AND ALSO TO SOME OTHER GOLD RELICS IN CORNWALL.

It is remarkable that amongst the numerous objects of gold found in Great Britain none should have occurred, as I believe, of the like description as the cup which, by the gracious favor of her Majesty, we are now permitted to publish. The precious relics heretofore brought to light have been exclusively of the nature of personal ornaments. In Ireland, as Sir W. R. Wilde informs us,[1] it is supposed that the native gold was the metal with which the primitive inhabitants were first acquainted, and a greater number and variety of objects of gold have there been found than in any other country in North Western Europe. These likewise consist, for the most part, of articles connected with personal decorations, and it is remarkable that they have rarely occurred, as in other countries, with sepulchral deposits. Ancient Annals[2] give us even the name of the artificer by whom gold was first smelted in the woods of Wicklow, three centuries before the Christian era, and affirm that by him were goblets and brooches first covered with gold and silver in Ireland. Banqueting vessels of the precious metals, as Sir W. Wilde states, on the authority of the Annals, were not unknown to the Early Irish; he points out, moreover, that some golden cup-shaped vessels in the Copenhagen Museum, which have been found suspended in tombs, strikingly resemble, when viewed in an inverted position, certain Irish relics of the same precious material and workmanship, noticed by Vallancey and other writers as regal caps or helmets.[3]

[1] Catalogue of the Antiquities of the Royal Irish Academy, by Sir W. R. Wilde, Metallic Materials, p. 355; Antiquities of Gold, p. 1.

[2] See the curious tradition preserved in the Book of Leinster, given by Dr. Todd, ibid. p. 7.

[3] Compare especially Worsaae, in the

The fashion of the golden *petasus*—like helm or cap with recurved brim and conical apex, seems little adapted, it must be admitted, to any use as a "banqueting vessel;" the style of decoration is doubtless that with which we are familiar alike in Early Scandinavian relics, and likewise in those of the sister kingdom. Gold cups of thin metal, ornamented with ribs and parallel lines, rows of small knots and concentric circles, that seem to be for the most part hammered up, are not infrequently found in Denmark and other northern countries; these vessels, although in their general form dissimilar to the cup found in Cornwall, present the same peculiarity of being round-bottomed; in some examples also the addition of a handle occurs, of a different fashion, however, to that of the Cornish treasure-trove.[4] A specimen recently shown in the Exhibition at Paris, amongst the Danish Antiquities, has, as described to me by Mr. Franks, the form of an ordinary basin, of very thin plate, ornamented with horizontal bands and concentric circles; it has a slight curved handle, like the elongated neck of some animal, terminating in a small head with ears, intended possibly to represent that of a wyvern. M. de Mortillet, however, describes it as the head of a horse rudely designed.[5] Eleven of these golden vessels, similar in their fashion, were found together in the Island of Funen. They are assigned by Scandinavian archæologists to the later times of the Age of Bronze.

There is great difficulty in suggesting a date, even approximately, for the remarkable relic brought before us by Mr. Smirke. Its discovery with a sepulchral deposit and urn in a cist of stones, more especially as being accompanied by a weapon of bronze, may doubtless lead us to assign the relics to a remote period, when the use of that metal prevailed.

Nordiske Oldsager, pl. 61, fig. 280. The Irish "crown," in form precisely similar to the "billicock" hat of our own times, is figured in the Introduction to Keating's History of Ireland; and Wilde's Catal. R. I. A., Antiqu. of Gold, p. 8.

[4] See the late Lord Ellesmere's translation of the Guide to Northern Archæology, p. 44, and various treatises on Scandinavian Antiquities. Dr. Wilson also refers to gold vessels found in Denmark; Prehistoric Annals of Scotland, vol. i. p. 406, second edit.

[5] G. de Mortillet, Promenades préhistoriques à l'Exposition Universelle, p. 121; given also in his Matériaux pour l'histoire primitive de l'homme, tom. iii. The head, as supposed, of a horse, occurs likewise on the termination of the handle, in objects of bronze found in Denmark, and described as razors. This feature, M. de Mortillet observes, may indicate a date subsequent to the Age of Bronze, properly so called. Representations of animals first occur, as it is stated, on objects of the early part of the Age of Iron. Promenades, *ut supra*, p. 120.

The fact, moreover, that in another remarkable discovery of golden relics in Cornwall, namely the two *lunulæ* found at Padstow, as related in this Journal by Mr. Smirke, the precious deposit was likewise accompanied by an object of bronze, a celt of the most simple form, the flat axe-blade that may have been probably the earliest type of the series of relics of that class.[6]

It is to be regretted that no record of the fashion either of the blade, described as a "spear-head," or of the cinerary vase and its incised ornamentation, should have been preserved. The sepulchral mound, however, enclosing an urn-burial in a cist, may unquestionably be referred to an early age of British antiquity, subsequent to the so-called Stone-Period. It is worthy of remark that the one-handled cup of amber, noticed by Mr. Smirke, found in a barrow at Hove near Brighton, was likewise accompanied by a bronze blade; the contents of that tomb included also one of those skilfully wrought stone axe-heads, perforated for a haft, a type of weapon familiar amongst Scandinavian relics of the "Age of Bronze."

I may here cite the opinion of one of our most reliable authorities in all such questions of difficulty, Mr. Franks, that the Cornish cup should be classed with the corslet found in the grave-hill at Mold, and the Lincolnshire armlet figured above; with certain golden ornaments also found in Scotland, in Ireland, and in Scandinavia. The same type of ornamentation will be found to prevail in all; its general arrangement being in horizontal bands, more or less enriched with lines of stippled, beaded or corded work, the surface in some examples ribbed or corrugated, in others elaborately embossed, as in the gold corslet from the barrow near Mold, with rows of studs, nail-head and other ornaments in strong relief. We find moreover, especially in Irish relics of gold, small concentric circles, and also patterns for the most part of chevrony or lozengy type, that closely resemble those on early sepulchral urns, occurring likewise, but more rarely, on bronze weapons and celts.

In considering the peculiar ribbed or corrugated fashion of relics of gold, such as those to which I have briefly adverted, we cannot fail to recognise a certain constructive

[6] Arch. Journ., vol. xxii. p. 277. See of this type of celt, Catal. Antiqu. R. I. Acad., by Sir W. R. Wilde, p. 362.

analogy to the remarkable circular British shields of thin bronze plate that have repeatedly been brought under our notice. In these we find around the boss a series of concentric rings hammered up, with intervening circles of knobs, in alternate arrangement, the knobs or studs having the appearance of round-headed nails, such as are often seen on the old Highland targets that frequently present an almost archaic aspect. In the bronze shield, as also in the corrugated cup or armlet of gold, it is probable that by such mode of construction, as already noticed, increased strength was obtained, with lightness and economy of metal.[7]

A few other golden relics found in Great Britain and on the Continent claim notice, in connection with the subject of the curious discovery brought before us by the gracious consideration of the Queen.

Of the great hoard of gold that was brought to light by the plough a few years since near Hastings, consisting chiefly it is believed of torques, armlets, and the like, some fragments only escaped speedy destruction in the melting-pot. Two of these are now in the British Museum; they have been figured in the Proceedings of the Society of Antiquaries, and apparently may have been portions of broad armlets, resembling that before figured found in Lincolnshire, or of some similar ornament.[8] They bear the same stamp of workmanship, the ribs with the lines of stippled markings between them.

Of similar workmanship is a broad gold bracelet in possession of Lord Panmure, at Brechin Castle, N. Britain, figured in Wilson's Prehistoric Annals of Scotland. It is of thin metal, hammered up, and formed with five ribs or cor-

[7] The corrugated material of which the bronze shields are formed is so thin that they seem little suited to resist any blow: it has even been suggested that these British relics were either objects of parade, or merely the superficial coatings of defences of more substantial description. This inference is wholly set aside on examination of the fastenings affixed to the inner side of these shields, and serving for the attachment of straps by which they were held on the arm, termed in after times *enarmes*, and also for that which passed over the neck or shoulder. It is then clear that there could not have been, as conjectured, any substantial lining, even of hide, upon which the corrugated bronze was affixed. The defensive quality of such a shield, insufficient as it would appear, may as I believe have been materially augmented by its corrugated construction. See notices of the principal examples of these shields in my Catalogue of Antiquities in possession of the Society of Antiquaries, and in an account of specimens found near Yetholm, Roxburghshire, recently published by the Antiquaries of Scotland.

[8] Proceedings Soc. Ant., vol. ii. new series, p. 247. A full account of the discovery at Hastings may be found in the Transactions of the Sussex Archæological Society.

rugated bands, and slight corded ornaments between them. This ornament, of which a portion is lost, was found at Camuston, Angus, in a cist, under an erect stone sculptured with a cross. A large skeleton lay in the cist; part of the skull had been cut away: an urn, ornamented with zig-zag patterns, was also found with this deposit, traditionally regarded as the remains of the leader of the Danish marauders slain there by Malcolm II. about the close of the seventh century. The interment, however, was doubtless of a much earlier period. The fashion of this Scottish specimen seems to be precisely similar to that of a diadem found in the county of Limerick, figured in Sir W. Wilde's Catalogue of Antiquities of Gold in the Museum of the Royal Irish Academy, p. 24, fig. 551.

Amongst other relics of gold obtained in Scotland, where such objects have been found in considerable variety, I may here mention an armlet brought to light in Angus. It had been deposited in a stone cist, and was accompanied by an urn; this example of the occurrence of ornaments of gold at the period to which the interments of that description may be assigned is recorded by Mr. Jervise, Memorials of Angus, p. 22 *.

Some remarkable examples of golden ornaments have been brought to light in France, especially the rich treasure of armlets found in Britanny, as described by the Rev. J. Bathurst Deane. The most singular object of the like precious material is a relic found in 1844 near Poitiers, and figured in this Journal.[9] It was regarded by Raoul Rochette as Gaulish. In general form it bears resemblance to a quiver; its length is 21 in., the decoration consists, as on the Scandinavian cups, of numerous concentric circles arranged in bands horizontally, and stippled markings. The ornaments seem to have been hammered up; the metal, in this instance, is not corrugated. The ornamentation may be compared with that of certain Irish objects of gold, such as the cupped "fibula" in the Museum of Trinity College, Dublin; and the boxes, by some supposed to have been used for mortuary purposes, in that of the Royal Irish Academy.[1]

It may seem scarcely necessary to remind the reader of

[9] Arch. Journ., vol. i. p. 252. Ornaments of Gold, pp. 60, 84.
[1] Figured in Sir W. Wilde's Catalogue.

the frequent occurrence of small fictile vessels with early interments; it has been supposed, with much probability, that they had contained food or drink, placed near the remains of the dead.[2] Examples of such vessels of any other material, especially of metal, as in the deposit described by Mr. Smirke, are very rare. He has adverted to the remarkable discovery of a one-handled cup of amber, accompanied by weapons of stone and bronze, in a barrow near Brighton. Such precious relics were, doubtless, objects that had been most prized in life by the deceased. A singular little cup, described as of oak, but possibly of the Kimmeridge shale obtained near the shores of Dorset, was found in that county in 1767, in a grave-hill known as the King Barrow near Wareham. In this instance the corpse had been placed, wrapped as it appeared in deer-skins, in a large hollow trunk of an oak; no weapon was noticed with the bones nor any trace of metal, with the exception of a portion, as stated, of gold lace. The little bowl-shaped vessel had no foot or handle, it was of oval form, the diameter at the mouth being 3 in. by 2 in.; the depth about 2 in.; the whole of the surface was engraved with horizontal and oblique lines.[3] It is supposed that it had been placed at the head of the corpse.

A small wooden vessel has been described by Professor Worsaae as found in a similar depository in Denmark in 1827. The oaken trunk lay in a barrow, near the village called Vollerslev; an urn was first disinterred in the superincumbent earth; below this was a heap of small stones, that covered the wooden coffin in which lay some locks of human hair, a woollen mantle, a sword and dagger of bronze, a palstave also with a brooch of the same metal, and a horn comb. The little cup that accompanied this remarkable interment had two handles; it contained some deposit having the appearance of ashes.[4] Several interments of the same description have been noticed in this Journal as occurring in

[2] Ancient fictile vessels, similar in some respects to the gold Cornish cup, but of less ancient periods, are doubtless familiar to the reader. I may mention particularly a small one-handled cup of earthenware, amongst Roman relics brought before the Institute in 1858 by Count Paolo Vimercati-Sozzi, of Bergamo. These objects were found in sepulchral cists of brick near Lovere, in Lombardy. The cup, lathe-made, is round-bottomed, and has a flat handle through which the finger could scarcely pass.

[3] See the account by Mr. Hutchins, in his County History, and in Gent. Mag. vol. xxxvii. p. 53; given also by Mr. Warne in his Celtic Tumuli of Dorset, in the Section of "Tumuli opened at various periods," p. 4. The cup, as stated, afterwards belonged to Gough.

[4] Worsaae, Primeval Antiquities of Denmark, p. 96.

the northern part of Sleswick. With the unburnt bodies, wrapped in woollen cloth and laid upon hides, had been deposited swords and other objects of bronze, with other relics, including cups of wood described as turned on the lathe, and in some instances ornamented with minute studs of tin skilfully hammered in. One of these curious cups, found in the trunk of an oak in a barrow called Dragshoi, has been figured in this Journal. It has one handle; the base is of such narrow dimensions that the vessel, when filled, could scarcely preserve its equilibrium, even when carefully balanced; the under surface of this foot is ornamented with six concentric circles of diminutive nails or studs of tin.[5] It may deserve notice that in one instance an armlet of gold was brought to light. These remains have been assigned by Professor Worsaae to the Early Bronze Age.

I have willingly acceded to the wish of our friend Mr. Smirke, that I should append to his account of the Rillaton Treasure Trove some notices of other objects which appear to present features of analogy that, by comparison, may aid the investigation of the period to which these and other golden relics should be assigned, especially in regard to their occurrence with some mortuary intention. We have been indebted to his kindness on a former occasion for an account of golden crescent-shaped ornaments, or *lunulæ*, found in Cornwall, four in number, resembling such as have frequently occurred in Ireland.[6] Whilst the foregoing notes have been in preparation, I have received from an obliging friend at Penzance, Mr. J. T. Blight, F.S.A., whose knowledge of antiquity has repeatedly aided my researches, drawings of two other Cornish relics of gold, likewise of Irish types. One of these, a portion of a penannular armlet, or possibly of a neck ornament, was found at Tredinney in ploughing near the "vow," or subterraneous walled chamber and passages at Chapel Uny in the parish of Sancreed, about two miles from Penzance; it is preserved in the Museum of the Antiquarian Society of that town.[7] British hut-circles and other early vestiges occur

[5] See the translation, by Mr. Ch. Gosch, of Worsaae's memoir on the Antiquities of South Jutland, Arch. Journal, vol. xxiii. p. 32. The wooden cup above noticed measures 6 in. in height; diam. of the mouth 12¼ inches.

[6] See Mr. Smirke's Memoir on the golden ornaments found near Padstow, Arch. Journ., vol. xxii. p. 275; Journ. Roy. Inst. Corn., 1866, p. 134.

[7] Penzance Nat. Hist. and Antiqu. Soc. Reports for 1862–65, p. 38; an account of the curious "fogou" or cave is given by Mr. Borlase, with a ground-plan, ibid. p. 14. The gold relic was found in 1864.

near the spot. The length of this fragment of gold is about 4½ in.; the armlet was a slight round bar of gold, in part somewhat twisted, it may be in the process of working it; the extremity is gradually dilated, terminating in an enlarged flat end rather more than a quarter of an inch in diameter. The dilated terminal knobs, varying from the simple button-shaped terminations, that first take a slightly cupped form, and gradually expand until they assume the broad saucer-like fashion of the so-called "mammillary brooches," are characteristic of Irish penannular ornaments.[8] The second relic of gold is a portion of a more massive penannular object, a cupped "fibula" of unusually large dimensions, and of a type almost exclusively Irish.[9] It was found near the Lizard, in a district of Western Cornwall replete with early remains, and is now preserved in the British Museum. The length of this fragment is 3 in., its weight 5¼ oz. It formed part of Payne Knight's Collection. The "calicinated" extremity must have been of unusual breadth, when perfect; the portion that remains measures 1¾ in. in diameter. The largest brooch of this description in the Museum of the Royal Irish Academy weighs 16 oz. 17 dwt. 4 gr., the cupped disc at each of its extremities measures 5 in. in diameter. It will be noticed in the woodcut, that the bow or handle of the Cornish fragment is lozenge-shaped, a variety of fashion that occurs in Irish specimens, but no example is figured by Sir W. Wilde. I have seen only one other "mammillary brooch" found in England; it was figured in my Memoir on Ancient Gold Ornaments in this Journal, vol. vi. p. 61, having been brought before the Institute by Mrs. Danby Harcourt, through Mr. Charles Tucker. This specimen, weighing 5 oz. 7 dwts. 22 gr., was found at Swinton Park, Yorkshire. Two similar objects are noticed by Gough as found, in 1780, near Ripon.

It is very remarkable, as Mr. Blight truly observes, that all the Cornish gold ornaments have their counterparts in Ireland. I have much pleasure in being enabled to publish representations of these remarkable relics that have become known to me through his courtesy.

ALBERT WAY.

[8] See Sir W. Wilde's Catalogue, Antiqu. of Gold, Mus. Roy. I. Acad., p. 52–75.

[9] Ibid.; compare Nos. 120, 122, 593, &c.

Portion of an Armlet found at, Tredinney near Penzance.
Museum of the Penzance Nat. Hist. and Antiqu. Soc. Weight, 10 dwt. 16 grs. Orig. size

Section of the solid handle.

Fragment of a "Mammillary Brooch" found near the Lizard. Payne Knight Collection, British Museum. Weight, 5¼ oz. Orig. size.

From Drawings by Mr. J. T. Blight, F.S.A.

THE BLACAS GEMS.

By C. W. KING, M.A.

PART II.—THE SIGNED GEMS, ETRUSCAN SCARABEI, AND HEADS, IDEAL AND REAL.[1]

THE gems of the Blacas Cabinet that especially arrested my attention during repeated and minute examinations in the course of the present year (1867) have supplied matter for the following observations. As the nature of my prefatory remarks suggests, the "Signed Works" demand the first to be passed in review. And, besides the interest attached to them as a class in consequence of the disputes to which their claims have so long given occasion, they, from the *factitious* value imparted to them by these very claims, represent a larger pecuniary equivalent than any other series in the collection.

Most important of the series is a finely-executed head of * Germanicus, in somewhat high relief. Behind the neck are incised the letters ΕΠΙΤΥΓΧ, remains of the full name Epitynchanus, which passes for that of the engraver, but which the very fact of its being *incised* declares to indicate the owner, or perhaps the dedicator, of this memorial of a justly-beloved master. In fact, the latter is the way in which Dr. Brunn himself explains an inscription of identically the same nature, the "Alpheus with Arethon," upon the memorable cameo of St. Germain des Prés, representing the same Cæsar and Agrippina. Köhler, it is true, with inexplicable inconsistency, admits this signature amongst the *five*, of which alone he allows the authenticity, although open to the very objection that suffices his severe criticism for the immediate condemnation of innumerable others of the class. But that the inscription was added in ancient

[1] Continued from p. 148, *ante*. It is necessary to explain beforehand the reason of one great deficiency in the following Notice, the want of Nos. identifying the several gems. The absence of them was, however, unavoidable, those at present attached to the rings only referring to a temporary arrangement to be entirely changed when the gems are hereafter arranged in the large showcase now in preparation. Those marked with a star were the first selected for exhibition.

times can admit of no doubt, the cameo having belonged to Fulvio Orsini, and actually been published, as we see it at present, as early as the date of 1598, in Faber's edition of the "Imagines Virorum Illustrium."

Next in point of long-established celebrity, and made known to the world at the same time, is a head of the youthful *Hercules, with the club upon his shoulder, in the exergue ΓΝΑΙΟC: a work in beauty equalled by that of the stone it adorns, a large blue beryl emulating the cerulean lustre of the sapphire. The style is the purest Greek, and as the features are evidently not ideal, we see here the portrait of some Greek prince who thus assumes the character of the mythic founder of his line—perhaps Philip himself, who was distinguished for his manly beauty.[2] The *name* must therefore have been added by a subsequent, and Roman, owner; one it may reasonably be inferred of the family of the Scipios (Cornelia) with whom *Gnæus* was a regular prænomen, and upon whose consular mintage this identical head was an equally regular type. This *gens*, therefore, has a better claim to its ownership than that of Pompey, to whom Faber unhesitatingly gives it on the strength of the name. To see in it that of the engraver is perfectly preposterous, for the reasons above assigned, which I doubt not will suffice for every one versed in Roman usages. This gem was stolen at the sale of the Strozzi Cabinet, but reappeared some years after in the Schellersheim, and, being purchased by the Duc de Blacas in 1859, was restored to its former company. In the interim its vacancy was supplied by a modern facsimile in aqua-marine, which still accompanies the original, and affords a useful comparison between the different styles of art.

*Medusa's Head in profile, perhaps the best known gem in the whole Strozzi Cabinet, has to me, notwithstanding its long-established reputation as a masterpiece of Greek art, all the air of an early Cinque-cento work. In the first place, the type has no precedent amongst ancient remains, but has originated in a complete misconception of the antique idea of the subject. The Greeks had two unvarying types of the Medusa. The one, the most ancient, the living Gorgon,

[2] When Philip's partisans at Athens were praising his beauty, his eloquence, and his drinking powers, Demosthenes retorted that the first was the merit of a woman, the second, of a sophist, the third, of a sponge (Plut.)

always shown in front-face, terrific and full of animated fury, representing in fact the Queen of Hell, the Destroying Principle, the Hindoo Bhavani[3]—the other its Praxitelean version, the *expiring* Medusa, soft and languid, generally in profile, but occasionally given in three-quarter face: *wings* on the brow belong to both—an expressive attribute never absent. Now this Strozzi Medusa displays no other expression in her face than that of a young lady rather pleased than otherwise with her novel style of *coiffure*. A very strong proof of its date is supplied by the material, a common white calcedony, much clouded by repeated application to heated wax; a stone never used for intagli in fine works of Greek or Roman age, but on the other hand a great favorite with the Cinque-cento engravers. The name ΣΟΛΩΝΟΣ in the field, which has given birth to the artist *Solon*, and to a long string of works by the same, was probably chosen to make the gem pass for the identical signet of the Athenian sage, who might be justly supposed to have a claim to this special attribute of his patron-goddess. In fact, the type of the first Attic coinage was the Gorgon, assumed for this very reason. The gem retains its Renaissance mounting, a slight case, chased with arabesques on the back, with two broad flat loops for a ribbon to fasten it to the cap after the common fashion of the age; this again is enclosed in a broad frame of serpents, intertwined with flowers executed in a very singular manner. The jewel was found exactly in its present state, near the church of Ss. Giovanni e Paolo, on the Monte Celio, at the beginning of the last century.

* Esculapius, a head in the noblest style of mature Greek art. Nothing in this branch can be cited more worthy of admiration for the dignified expression of the features, and the masterly treatment of the flowing hair and ample beard. In front is the mystic serpent-twined staff,—an idea taken from the similar distinctive of Egyptian priesthood. In the field, on a tablet, the name ΑΥΛΟΥ doubtlessly indicates a subsequent Roman possession of the gem. This signature became the most popular of all with the interpolators and forgers, on account of the celebrity of this piece, upon which it first appeared, for it has belonged to Lorenzo dei Medici,

[3] Whose idol yet bears a head identical not only in character but in all its adjuncts.

and afterwards to Voltaire. The back part of the head, unfortunately broken away, has been neatly restored in gold.

*Alexander, a portrait endorsed with the signature of his own engraver, Pyrgoteles! is a work as unmistakably modern as its extravagant pretensions would predispose the experienced amateur to expect. Besides the recent style of the design, the material, a common white calcedony, alone suffices to declare its origin.

The same signature is *said* to be contained in certain illegible characters scratched on the field of a very noble antique work in amethyst, a *Medusa's head with closed eyes, as if just expiring, full of a dreamy voluptuous languor, and which may be pronounced, perhaps, the finest example in existence of this particular type.

*Silenus, a head in profile, a deeply-cut and vigorous impersonation of the character, but which is probably no more than a successful imitation of the antique, for the stone is a Bohemian amethyst of the most beautiful *ponceau* tint, not the *violet*, or the clouded Indian species, alone employed by the ancient engravers. Of course so pretentious a performance demanded a signature, and ΥΛΛΟΥ accordingly appears conspicuously in the field; but even the indulgent Dr. Brunn passes sentence against both work and name. Nevertheless, the Parisian connoisseurs, misled, as usual, by their too strong predilection for beauty of execution, have estimated this piece as highly almost as any other in the cabinet.

*Pan, a head in three-quarter face, replete with life and humorous fury, deeply sunk in a pale amethyst. Such is the merit of this gem that it extorts from Köhler himself, chary as he is of his praise, the well-deserved encomium "that both for invention, and extreme spirit of execution, it is one of the greatest masterpieces of antiquity." The name ϹΚΥΛΑΞ in the field, we need not reject, with Köhler, for an interpolation, but rather take it for the owner's, who chose the sylvan god for his patron, in allusion to the sense of his own appellation, "Scylax," a whelp. Wherever this name occurs on a gem it will be found that the designs it accompanies are all of a similar character, being fauns, satyrs, beasts of chase, &c.

Hercules, head with the name ϹΕΛΕΥΚΟΥ in front, though a long-celebrated piece, proves upon examination but a me-

diocre, and apparently a Cinque-cento production. Its engraver doubtless intended the name to pass, in his own day, not for the artist's, as subsequently interpreted by modern infatuation, but for that of the illustrious Syrian king. Sard.

Terpsichore, standing, tuning her lyre, and backed by a cippus supporting a statuette. A large intaglio at first sight very imposing, but which examined in its details, more particularly the folds of the drapery, betrays the feeble touch of the modern imitator. The pretended signature ΑΛΛΙΩΝΟC appears conspicuously in the field. The imaginary artist ΑΛΛΙΩΝ and its attempted better reading ΑΛΛΥΩΝ (names entirely inconsistent with the laws of Grecian nomenclature by which all appellatives are regularly formed from recognisible roots), was generated, as Köhler has clearly proved, from the ΔΑΛΙΟΝ, Δηλίων, "of the Delians," accompanying a head of Apollo, but which the ignorant forgers mistook for a proper name. Hence the very appearance of this preposterous signature on a gem, is alone sufficient to discredit its authenticity. The stone is an onyx of a curious sort, having a crystalline layer interposed between two of opaque grey; but it has been much *doctored* and roughened to give the whole the required air of antiquity.

The same subject, exactly repeated, though on a much smaller scale, in sard, has no real claims to the celebrity it has so long enjoyed, having all the appearance of a poor antique greatly retouched and that by no very skilful hand, and the inscription at the same time interpolated. The original is said to exist in Baron Roger's cabinet. To complete the deception, this sard has been purposely mutilated below in the same manner as its prototype.

We now come to three gems making the highest pretensions to importance, for each of them displays the honoured signature of Dioscorides, the court-engraver to Augustus. The *head of that emperor, with ΔΙΟCΚΟΥΡΙΔΟΥ neatly cut in the exergue, has to me the appearance of an antique intaglio, although some have pronounced it a paste. But the portrait is certainly not that of Augustus, much more resembling Hadrian's. Amethyst.

A much finer work, bearing the same signature, running vertically down the field, is the bust of *Julius Cæsar, in front face, deeply sunk, with uncommon fineness of execution, in a

very beautiful jacinth. This execution, however, displays less of the antique character than the Townley sard with the same head and name, of which there is reason to believe the gem before us to be an *improved* copy.[4]

Thirdly, comes a *Thalia, holding up a comic mask, a three-quarter length semi-reclining figure, and worked out in the purest, most finished style of mature Greek art, so that it is certainly fully worthy to carry the illustrious name which some recent interpolator has selected it to display. He had, however, forgotten the acute remark of Köhler in a similar case, "that the work was too good for Dioscorides to have been its author."

Achilles seated in his tent playing the lyre, his arms suspended from a cippus before him, parallel to which is carefully engraved the signature ΠΑΜΦΙΛΟΥ in microscopic lettering, is a neatly-finished copy of the well-known Paris, or Devonshire, gems with this subject. But the copyist has had recourse to a clever device in order to disarm suspicion, having selected for his purpose an antique *sardoine*, bearing on the reverse ΙΑΩ, in the rude forms of the Lower Empire; the obverse of the amulet having been made to give place to a more elaborate performance, making higher pretensions to art.

To the same date, perhaps to the same hand, so marked is the similarity in their treatment, may be assigned the young Giant defying Jupiter, also cut upon a shaded sardoine, and marked on the field with ΔΙΟC, in which its former possessor doubtless paid dear for the endorsement of Dioscorides.

But the Achilles Citharœdus, an unsigned work on sard, is beyond all cavil an excellent production of the Glyptic art at its most flourishing period.

Seated Sphinx scratching her ear with her hind paw, in the forced attitude such a favorite with the archaic artist, is an admirable example of the *scarabeus* manner in its highest development. The ΘΑΜΥΡΟΥ in the field in the Ionic character, and therefore much more recent than the execution of the intaglio, must necessarily be the addition of a later, though still an ancient hand. It is, however, impossible to assign the reason for his affixing the name of the old Thracian poet, the ill-starred lover of the Muses, to this

[4] The ridiculous blunder in the name ΔΙΟCΚΟΡΙΔΟC for ΔΙΟCΚΟΥΡΙΔΗC plainly indicates an Italian fabrication.

beautifully-depicted monster, the proper symbol of Thebes. This gem, or else a replica, is always cited as existing in the Vienna Cabinet; but of the genuineness of *this* no experienced eye can have the slightest doubt. Sard.

One of the most celebrated of signed gems, the *Hercules Bibax, with the name ΑΔΜΩΝ in the field. This is the Molinari gem, and, in my judgment, the original of the Marlborough and the other numerous *repliche* of the type. The work is peculiarly soft, and fades into the stone in a manner no modern hand has ever caught. The quality of the stone, a rich golden sard, gives this work additional support against the pretensions of the Marlborough, which is cut on a poor cornelian. The name, however, must be taken from the invented artist, Admon, and restored to the first owner of the signet.[5]

Bust of Melpomene[6] contemplating a mask with high foretop and flowing beard, placed on a cippus before her—a pretty but sketchy antique; only deserving of notice from the inscription ΓΝΑΙΟΥ, which has occasioned its admission into the list of signed gems. Sard.

Dolon grasping the knees of Ulysses whilst Diomede is about to strike off his head. A very fine engraving in the early Greek manner; displaying in the exergue the signature ΗΕΙΟΥ, added for the sake of augmenting its value by some forger, who was not aware that in the age to which this work belongs Η was not yet a vowel, and the genitive ended in Ο not ΟΥ. Sard.

*Rhœmetalces, king of Thrace, as this vigorously-executed portrait has been designated, upon no sufficient grounds.[7] ΑΜΦΟ in the field has given birth to an imaginary artist, Amphoterus, but more probably the letters are the initials of a legend of a talismanic nature. Dark agate.

A portrait of an elderly lady, with her hair dressed in the quaint fashion set by Plotina, has also been valued as a "signed work," from its bearing the inscription ΑΝΤΙΟΧΙϹ,

[5] The peculiar lettering of the name has long excited suspicion as to its antiquity; but I have recently seen a Nemesis (in the collection of Professor Churchill Babington) surrounded by the owner's name ΔΙΟΜΗΔΗϹ, in precisely the same tall characters: a mediocre Roman intaglio of which the genuineness was self-evident.

[6] With the early antiquaries this passed for the authentic portrait of Virgil; later and more pedantic times discovered in the design Calliope weeping over the severed head of her son Orpheus.

[7] The fineness of the style declares it long anterior to his date: in fact, the head much resembles that of Philip Arrhidæus on the coins.

though unmistakably referring to the original of the likeness. Sard.

* Sex. Pompey, with ΑΓΑΘΩΠΟC ЄΠΟΙЄΙ written across the field, can only be a copy of Andreini's well-known gem (Florence), which itself is considered of very dubious authenticity. Sard, large size.

Socrates, signed ΑΓΑΘΗΜЄΡΟΥ across the field, although done in a very masterly style, seems to display more of the *technique* of the Cinque-cento than of the antique school in the cutting of the intaglio. Sard, of fine colour.

Diana standing, backed by a stag which she grasps by the horn. The whole attitude of the figure, and the drapery falling in stiff parallel lines, declare the original intaglio a transcript from an archaic group in bronze. In the exergue ΗΕΙΟΥ, the owner's name, whom Letronne takes to be Heius, the *Oscan*, the friend of Verres. Although the work of the gem is long anterior to that date, yet the name probably indicates the nationality of the school producing it. Antique paste.

Fragment, exhibiting two legs of a standing figure backed by an outspread robe. The latter adjunct suffices to inform us that the complete design was a Hermaphroditus unrobing himself, in the customary action of the type. In the exergue ΑΛΛΙΩΝΟC. A very amusing exemplification of the impudence of the fabricators of signed gems; this being a replica in amethyst of the Demidoff *fragment* in chrysolite.

ETRUSCAN SCARABEI.

A most interesting and valuable portion of this cabinet are its numerous *Etruscan Scarabei*, the monuments that enable us so clearly to trace the introduction of the arts of design from Asia into Greece and Italy, as well as the successive stages in their naturalisation and growth to perfection in those more tasteful regions.

First in the class may justly be placed the *Combat between Hercules and Cycnus, son of Mars, upon the banks of the Echedorus. The hero appears lifting on high his club and rushing in to give the finishing blow to his heavy armed adversary, already sinking back fainting from its previous strokes. The grouping of the figures is truly wonderful, scarcely any composition in the whole range of

glyptics can be pointed out so full of spirit and movement, and this is matched with equal excellence in the execution: the artist's talent being as conspicuously displayed in his treatment of the nude in Hercules, as of the minute details of the panoply in his opponent. The names of the two, inscribed in large Etruscan letters, HEPKLE KVKNE, leave no doubt as to the nationality of the artist claiming the honour of this wonderful performance. Sard, blanched by fire.

Sisyphus engaged in his hopeless labour; not, as in the later representations of the story, copied from Homer, of rolling a huge rock up a steep, but more prosaically and quite in accordance with the matter-of-fact character of Etruscan design, lifting a big building-stone up the steps of a pyramid, which, evidently, is supposed ever to fall to pieces at the moment of completion. The drawing of the figure is very correct, but its execution, almost entirely drill-wrought, not equally commendable. Sard.

*Head of Castor, with boyish and beautiful features and a very fine profile, wearing a tall conical *petasus* having a loop at the top, and tied under the chin with a string. The personage intended would have admitted of some uncertainty, but for the fortunate discovery of an Oscan vase,[8] upon which are painted two heads, unmistakably meant for the twin Dioscuri, but each so exactly identical in design with *this*, that both painting and intaglio would appear the work of the same hand, or else both copies from the same famous original. Intaglio shallow, and most exquisitely finished, in a very fine amethyst, an unusual material for works in this early style.

*Capaneus struck down by Jove's bolt, a carefully worked engraving: but the gem, a *scarabeoid*[9] in yellow and green onyx, is chiefly remarkable for its adjuncts. Upon the back is engraved, in faint relief, a negro kneeling, with a *situla*, or bucket, upon his arm, an example of Etruscan cameo-work of which not above half-a-dozen other instances are known; whilst the vertical edge of the stone is covered with a bold *guilloche*, also in relief, very skilfully applied.

*Head with long hair, bound with a fillet, and peaked beard; an invaluable specimen of the first essays at por-

[8] Figured in the Bulletino dell' Inst. Arch. di Roma for 1865.

[9] An elliptical flat disk, perforated through its axis, as common a vehicle for archaic *Greek* art as the complete beetle-form for *Etruscan*.

traiture from the life, for though some may consider the head to be an archaic Jupiter's, yet there is better reason for supposing it drawn as the *vera effigies* of some Etruscan *lucumo*, or early Italiote *tyrannus*. Very minutely worked out with the diamond point, in the highest archaic style. The scarabeus is above the average size, and formed of the rare sap-green Indian jasper.

* Hercules and Mercury standing side by side, the latter holding his *petasus* in his hand. The character of the work is late, almost Roman in style, and the outlines are much damaged by the injudicious repolishing of the field. The scarabeus is unusually large, admirably cut out of a sard of singular beauty.

Patroclus lifting up the armour of Achilles from the ground, as antiquaries are pleased to understand the subject, is good both for its drawing and finish. Sard.

Ulysses kneeling upon the back of a monster turtle that is carrying him over the waves, and which he rewards by holding a bunch of grapes above its upturned mouth.[1] The Bull. dell' Instituto interprets this group as emblematic of the patience of the wandering hero, but this idea appears to me much too sentimental for the early period of art to which the *original* of this work must be referred: it is more reasonable to see in the subject some old Pelasgic myth now no longer recorded, concerning the preservation of a hero by a turtle, like that of Icadius Arion, and Telemachus by a dolphin. Sard.

*Tantalus stooping eagerly down to catch at the water that recedes from his grasp. The element is represented by the usual conventional wave-pattern, and the manner in which it is shown to fly back from the feet of the damned one into a sloping heap is singularly curious, and expressive. The work of this intaglio is of the most finished kind, but on a very small scale.

Hercules standing before a fountain which gushes from a lion's head: he lifts to his mouth a cup of the water, and rests his other hand upon his club. As this type appears exactly upon a coin of Himera, where it commemorates the

[1] This is a poor, perhaps modern, copy of Sibilio's admirable gem (I. G. iii. 45), but omitting the bunch of grapes, and the waves, from a want of intelligence in the copyist. From the absence of these two explanatory adjuncts the present design is ridiculously catalogued as Hermes about to slay the tortoise that supplied the sounding-board for his lyre.

hot-springs of that place, this gem may with good reason be supposed of Sicilian origin. Amethyst, discoloured by fire.

Hercules seated on the funeral pyre, the tongues of flame rising from all points towards him. The easy posture by which the artist meant to depict the composure with which the hero meets his fiery death, has a comic gravity about it that is irresistibly ludicrous, suggesting, coupled with the shape of the pile, a most ridiculous idea. Banded agate.

Warrior stooping to pick up his helmet, declared to be a Capaneus by the legend KAPNE in the field, seems a modern work: and what augments the suspicion, the action of the hero has no connection with the story of Capaneus.[2] The setting, too, which is of singular and elegant pattern, is indubitably an imitation of the antique. Banded agate.

*Achilles wrapped in his chlamys, seated on a chair; Patroclus, in his friend's armour, going forth to battle, is taking leave of him. A highly finished work. The subject has been kindly explained to us by the Etruscan artist, who has written the ill-fated hero's name, PATROCLE, in the field. Sard.

Warrior fallen on one knee, holding a bow and brandishing a club; overhead, a star. This last symbol has given occasion for naming the hero Orion; but the agent of that giant's punishment was a *scorpion*. The subject must rather be explained as another rendering of the legend so popular in Etruscan art, Philoctetes serpent-stung in the act of violating his promise to the dying Hercules, by betraying to the Greeks his concealed weapons, required for the capture of Troy. The star, according to the rule of ancient pictorial symbolism, only serves to indicate that the time of the occurrence was night. Sard.

Another intaglio, of much more finished work, may plausibly be supposed to exhibit the same false friend cautiously approaching the heap of rocks under which the weapons lie: the club being represented as visible, in order to tell the story better. Sard.

[2] Köhler asserts that J. Pichler executed many scarabei, copied from the antique, and intended to pass for the originals: *this* has all the appearance of belonging to his fabrique.

HEADS, IDEAL AND REAL.

Next to be considered are the heads and portraits of deities and celebrated men, which form a very important constituent of this collection. The following are noticed not in any regular order, but as they attracted my attention in looking over the cases at different times.

No man of taste will, I think, differ from me in giving the post of honor to an Apollo, with long curled tresses, bay-crowned; the very beau ideal of gem-work, in the best Greek style. In front are indicated the bow and arrows of the god; some later possessor has cut his initials, C V, in the field. Amethyst of large size, and very deep violet; the surface much worn, as is customary with antiques in this softish gem.

The same head, repeated in a more sketchy and flowing manner upon a similar material, has much the appearance of imitative modern work.

Jupiter, a very noble head in the perfect Greek style, is to be reckoned amongst the finest of its class for dignity of expression and beauty of work. Large sard.

*Deus Lunus, wearing a Phrygian bonnet encircled with bay, his bust resting upon the crescent luminary whose presiding genius he was accounted, is done with much spirit in the manner of the school of Hadrian. A highly interesting subject, representations of the patron-god of Carrhæ being extremely rare. Sard.

Cupid, a bust seen in front-face, with a string of *crepundia* about his neck, belongs to the same period. This subject is chiefly valuable from its so clearly exhibiting the nature of this ornament, a necklace composed of various *charms* embossed in hollow gold. Sard.

*Victory, a bust in front-face, the head slightly inclined forward as if the goddess were descending from above, is perhaps the finest example I have met with of work in this extremely difficult style, the relief of the impression being considerably above half. Large sard.

Young Hercules, a delicately-finished work, in a pale pink stone, perhaps a balais-ruby, though very highly prized by the late owner, affords room for suspicion that it emanated from the school of the Pichlers.

The Julius Cæsar, on a large *sardoine*, though received for

a contemporary likeness, and highly admired by the Parisian connoisseurs, strikes me, on the contrary, as no more than a mediocre performance of the Cinque-cento school.

To the same period, but to one of its most eminent artists, I assign the *Bacchante bust seen in front; for in spite of the technical excellence of the engraving, the vulgar and gross conception of the Mænad, a mere drunken, jolly beauty, is utterly repugnant to the antique idea of the same character, which was that of inspiration, or rather frantic possession by the deity, having nothing at all jocose in its nature. This Bacchante, on the contrary, is little more than a half-intoxicated, good-looking courtezan, laughing heartily at some coarse pleasantry; Bacchus being no longer the god of the Mysteries, but only the synonym for intoxicating liquor in the estimation of the age which produced this work.

Perseus, the last king of Macedon, wearing the winged helmet, and carrying on his shoulder the hooked falchion of the hero, his namesake. The features of this clever portrait clearly exhibit the crafty and mean character of this miserable and ill-fated successor of Alexander. This gem is of unusual historical value, having in all probability served for the signet of the king himself; a supposition confirmed by its material, lapis-lazuli, which, as Epiphanius informs us, was styled *royal*, doubtless by reason of its original appropriation to this usage.

*The Dying Medusa, with the wings drooping low over the face; an intaglio without a rival for the delicacy of its finish, as well as the exquisite beauty of the profile. This is the original of the numerous repetitions of the type that so frequently present themselves to the collector. Pale amethyst.

*Young Faun, a front-face full of sportive mischief; the work of the highest order, very deeply cut in a large pale jacinth.

*"Jugurtha" is the *conjectural* name given to a head with a somewhat African profile, and the hair and beard closely cropped. The work, however, does not bear the genuine impress of antiquity although executed by a masterly hand, and doubtless intended to embody the popular idea of the Numidian usurper. Yellow sard of considerable size.

Gordian III., an excellent likeness of this prince imme-

diately upon his accession as a boy of twelve years. The execution of the intaglio is equal to any to be met with in the material, a nicolo, on the flat face of which it is deeply engraved. On the reverse, which is convex, a singular addition, the purport of which baffles conjecture, has been made by a contemporary hand—a column supporting a concave sun-dial, from the capital hangs a sword, a shield rests on one side, and on the other is marked the owner's name in large letters, A. FOL.

Head of an elderly man in a Phrygian cap, round which is tied the regal diadem. At first sight this would be taken for the conventional portrait of Priam, but the face upon examination shows so much individuality that I cannot doubt its being a likeness from the life of some petty Phrygian or Parthian prince of historic times. The work is very peculiar, much resembling that of the Sassanian engravers. Sard.

*Juba II., king of Mauritania. The erudite and virtuous prince in this admirable portrait fully deserves the epithet Cicero jocosely applies to his father during his visit to Rome —he is certainly "bene capillatus," his amazingly thick and flowing locks bound with the regal diadem. Perhaps, like the Carthaginians, who must have been the Parisians of Africa (and the Egyptians ages before them), the Moorish noblesse wore full-bottomed wigs when *en grande tenue*. Silius describes a Punic hero, "horrentes effingens crine galeros;" and Hannibal in his bust is unmistakably bewigged. This fine intaglio must have been cut by the court engraver of Juba's patron Augustus, and from the extreme youthfulness of the portrait, probably on the occasion of his being restored to the paternal throne. Visconti figures it, (Icon. Grec. pl. xvi. 3,) when it was in the De la Turbie Cabinet. The catalogue, by some unaccountable mistake, gives this youthful portrait to Juba I., whose monstrous peruke of bee-hive shape, and long-peaked beard, are familiar enough to us from his coins to have prevented such confusion. It also, with still stranger perversity, styles Juba II. a diademed head of some elderly Greek king, with features totally unlike either of the Numidian princes. Sard.

*Livia Augusta, her head veiled, and wheat-crowned as a Ceres; intaglio very delicately finished. It is surrounded by

seven groups in *relief* of objects, the recognised attributes of all the other goddesses. Thus we see the lion of Cybele joined with the crook and cymbals of Atys; the Eleusinian cista mystica, whence issues an asp, supporting the modius of Serapis; Minerva's owl perched upon her gorgon-embossed shield; the cornucopia crossed with the caduceus above a patera, symbols of Justice and Piety; then some mysterious sacred thing; next Juno's peacock; and lastly, something undefined, but perhaps meant for a distaff. Such a combination of sunken and relieved work in the same gem is of the utmost rarity. Only one other example is known to me—a bust of Antinous as Bacchus, intaglio in nicolo, surrounded by a frieze in relief of Bacchantes, Satyrs and Cupids, infinitely superior to the work before us in tastefulness of design, and fully equalling it in execution.[3] The material of our Livia is agate-onyx, the ground transparent, the relief opaque white, 1½ in. in diameter; unfortunately cracked across.

Another veiled head of Livia is in a much higher style of art, worthy of the best Greek times, in a large clear yellow sard.

Augustus, a laureated head admirably done, but by a modern hand, as is perfectly demonstrable, not merely from the style, but from the material—a brilliant red jasper; the employment of which is entirely inconsistent with the pretended date of the work upon it. It is evidently an antique stone, the poor original intaglio upon it having made plane for this more important performance—a mode of deception the most successful of all, and consequently much in vogue with the fabricators of the last century.

M. Agrippa, a good portrait, though somewhat stiffly drawn, occupying the middle of a large jacinth, the edges of which have been faceted in recent times in order to elicit the beauty of the material.

Plato, with the Psyche-wings attached to his temples, and represented as a terminal bust; a good specimen of the Roman imperial school, to which nearly all our gem-portraits of philosophers in reality belong. Sardoine.

The portrait, however, of Posidonius the Stoic, and friend

[3] Published by Millin in his Pierres gravées inédites. Now in the possession of Mr. Heywood Hawkins, and to be seen amongst his contributions to the Loan Museum, South Kensington.

of Cicero, is of much greater value; for its admirable style proves it taken from the life, and probably at his residence, Rhodes, as a present to one of his admirers at Rome, perhaps Cicero himself. Sard.[4]

Germanicus and Agrippina, their portraits in miniature occupying two votive clypei borne aloft by a winged Victory; a very remarkable performance of the Augustan age; the subject having been so cleverly adapted to the material that the clypei coincide exactly with the two *eyes* of a richly-coloured cabochon onyx.

Herodes Atticus, a noble example of the style in which Roman glyptic art succeeded best—portraiture; so life-like and full of individuality is this face. Sard of large size and very fine quality.

Of the three portraits ascribed to L. Verus, the earliest, a very finished work in sard, is, beyond all doubt, his father L. Ælius: the second, in semi-opal mounted in an octagonal frame of green enamel set with diamonds, his *reputed* son, Commodus; and the third, most valuable of all, a most indubitable Pertinax, in a fine paste imitation of the sardonyx.

Head of a hero wearing a Corinthian helmet, with a singular peaked crest. The work very fine, and an interesting example of a portrait in the very earliest style. Sard.

The "Sardanapalus," in the finest possible sard, with an exact copy in red and white agate; a head in a somewhat archaic style, with the hair bound with a fillet, and a long beard of "antique cut," has certainly no just right to the name it goes by. The *fillet* would rather lead one to attribute it, as the copy from a bust, to some ancient soothsayer[5] or poet.

Carinus and Magnia Urbica, confronted busts done in the stiff neat manner of the gold coins of their date, and undoubtedly a contemporary work; valuable, therefore, by reason of the extreme rarity of glyptic remains of the Lower Empire. Red jasper.

*Caracalla, as the portrait is styled in the catalogue, but

[4] Visconti first discovered and identified this gem portrait by comparison with the *named* bust, when in the De la Turbie cabinet.

[5] The character would well suit Attus Nævius, whose bronze statue (necessarily an Etruscan work) was standing when Pliny wrote. That the augurs wore the fillets ex officio appears from the anecdote Plutarch tells of Q. Cornelius, a Paduan augur, a friend of Livy's, vowing he would never again wear one, if his prediction (on the very day) of the event of the battle of Pharsalia were not verified.

assuredly of too debased a style for his times. The work, though semi-barbarous, has evidently been executed with great care, and the best its period could produce. This circumstance would well tally with the reign of Galerius Maximian, whom moreover the features much resemble, and the close-cropped hair and beard, "ad pectinem tonsus," are the fashion of his age, not of Caracalla's. Engraved in a shallow manner upon the plane surface of a large and beautiful sardonyx, a precious material indicating the importance of the signet.

Another interesting example of this very rare class of Lower Empire portraits is the head of Hercules covered with the lion's skin, under which disguise the strongly-marked features of *Herculius* Maximian are easily to be recognised, boldly though coarsely sunk in the sard by a hand yet retaining somewhat of the spirit of an expiring school.

Augustus, a fine portrait in a brilliant white stone, of a singularly striated texture; apparently a colourless beryl.

Hadrian wearing a mural crown, like the head upon the coins of Evagoras the Cyprian. Red jasper.

"Poppæa and Silanus" must, on better grounds, be restored to the memory of some nameless bride and bridegroom (as the wheat-ears and poppies proclaim) of the times of Hadrian, to which the *cöiffure* of the lady assigns them, as well as the material, red jasper, which had not come into use in Nero's reign. Red jasper.

Aristippus the Epicurean: his portrait in the midst of figures of Venus, who crowns him, and Bacchus offering his bowl, and the busts of Apollo and Pallas, in allusion to the deities inspiring the works of this very popular philosopher. Antique paste, taken from a well executed gem of Roman work.

* Youthful Poet, as the bay-sprig in front clearly indicates. The face has been given to Horace, on the testimony of the H. placed conspicuously in the field: and there seems no reason for disputing the validity of the attribution. This gem is shown by its style to have been engraved some two centuries after the poet's demise, but when authentic likenesses of him were still extant in abundance: amongst others, a statue in the forum of his birthplace, Venusia. Yellow crystal, wrongly described as a topaz.

*Bust of a warrior, with an Attic helmet on his head, and chlamys hanging over the shoulder. One of the earliest and finest portraits in the early Greek style anywhere to be discovered; and of extreme interest as being the actual one[6] that Visconti, on very convincing grounds, has assigned to Miltiades (Icon. Grec. pl. xiii. 4). The work of the intaglio is exactly what the glyptic art in that hero's epoch might have been expected to produce; delicate in the extreme, but still retaining some archaic stiffness. Pale amethyst, unusually large.

Hercules, the young head, the most beautiful example of the type possible to be met with, in a sard of a quality commensurate with that of the work upon it; accompanied by Omphale, a delicately worked, miniature head. Sard.

*Minerva, three-quarter length figure: her hair hanging in short stiff curls, tied with a fillet, has a lofty crest bound over all: her breast is covered with a transparent drapery, perfectly exhibiting the contour of the bosom underneath, over which play the serpents of the Ægis on the other side and not in sight. It is evident that this very fine gem is a transcript from some celebrated bronze colossus, a masterpiece of archaic art. This is proved by the peculiar treatment of the hair, unmistakably speaking of antique metal work; and yet more, by the existence of an exact *replica* of the same bust (Florence), only upon a much larger scale than this sard, which itself considerably exceeds the customary extent of a signet gem.

*Paris in his Phrygian bonnet, with his goat-skin chlamys and shepherd's crook, holding out the golden Apple of Discord: a pretty example of a good Roman period.

Youthful Hercules, a minutely finished head in a plasma closely resembling the emerald, so pure and brilliant its texture, doubtless representing the *Smaragdus Cyprius* of Pliny. The extreme uncommonness of fine work in plasma renders this little gem well deserving of the attention of mineralogists.

Africa, typified as a female bust seen in front, her head covered with the hide of an elephant whose ears depend on each side and form lappets. This work is in a much earlier style than any others of the type known to me, which all

[6] Then in the De la Turbie Cabinet.

belong to Roman art. As we perceive from the medals that Ptolemy-Alexander chose to be figured in the same singular head-gear, it is a reasonable inference that his queen may have been similarly depicted ;[7] and the workmanship of the gem before us would well suit the same flourishing period of the glyptic art. Yellow sard.

Silenus, a meritorious work, the field of which having been cut down to very narrow limits, the gem (sard) has been neatly inserted into a second of red jasper, so as to afford it sufficient space. The ΣΚΥΛΑΚΟ is a modern addition.

Thalia's head, in profile, the hair hanging down in thick stiff curls : the style, which is uncommonly bold, is similar to that of some Thasian tetradrachms : annexed is her comic mask in full face roughly cut in, and seemingly unfinished. Large yellow sard.

Of nearly equal merit is the full-face Mask of an old man, having the beard spread out in the shape of a fan. The expression is so replete with comic drollery, that one can have no hesitation in assigning it to the character of the parasite. Yellow sard.

[7] In fact his mother Cleopatra, wife of Physcon is thus represented on a bronze medal figured by Visconti (Icon. Grec. Pl. xiv. 6). I can only offer a conjecture as to the significance, that since the Macedonian kings chose to appear on their medals like the Grecian Hercules clothed in the lion's hide, so the Ptolemies assumed the charioteer of the Libyan Hercules, thus suitably distinguished from the other. The Egyptian queen assumed the elephant's head-dress by the same right as Iole or Omphale so frequently does with the lion's. In Roman times this same type stood for the city of Alexandria; but such ideal heads were not in fashion so early as the times of Cleopatra and her son. It is even conceivable that the first idea was supplied by the elephant-headed Ganesa, the Hindoo Hermes, with whose figures the Greeks of Bactria must have been very familiar.

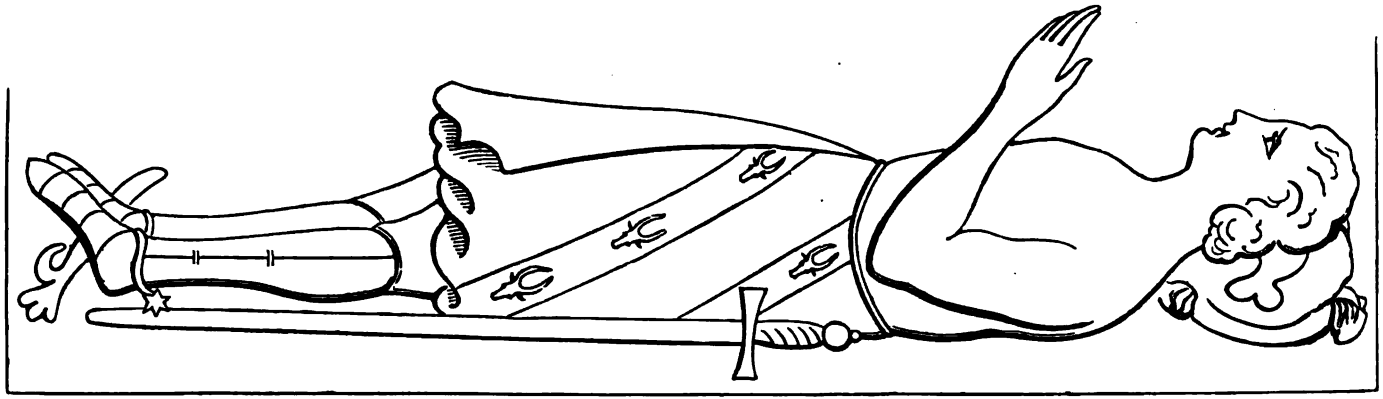
(To be continued.)

STANLEY MONUMENT IN LICHFIELD CATHEDRAL.

In the south aisle of the choir of Lichfield Cathedral is a very curious monument representing a knight naked to the waist, below which was formerly a deep skirt painted with the arms of Stanley, the legs being in armour.

This figure is traditionally assigned to a "Captain Stanley," who for some offence against the Church had been excommunicated, but having at length made atonement for his sin, was admitted to sepulture in holy ground on condition that the evidence of his punishment should appear on his sculptured effigy. The monument, however, having suffered greatly from time and desecration (for the cathedral had been occupied during the Civil Wars by a parliamentary garrison), and no trace of colour remaining to bear out the tradition, this singular memorial remained for many years a puzzle and a doubt. A little time ago, however, the writer of this notice had the opportunity of examining the very curious volume of drawings made by Sir William Dugdale and his assistant Sedgewick for Sir Christopher Hatton, created Baron Hatton of Kirby, Northamptonshire, in 1643, containing views of various monuments as they existed in England previously to the demolition effected by the Roundheads. This very valuable book now belongs to the descendant of Lord Hatton, the Earl of Winchilsea; it was sent by his courteous permission for the inspection of our Society, and has been described in the nineteenth volume of this Journal.

Among the drawings of this collection is one of the Stanley monument, from which the sketch of the effigy here given is a copy. The drawing in the original is coloured, and shows very distinctly the upper part of the knight's body *in puris naturalibus*. The skirt has the arms of Stanley, *argent* on a bend *azure* three bucks' heads caboshed *or*; the legs are in armour; under the head is a buck's



Effigy in the South Aisle of the Choir, Lichfield Cathedral:

The Memorial of Sir John Stanley, of Pipe, Staffordshire, *temp.* Henry VII.

From a drawing in the Collections made for Sir Christopher Hatton by Sir William Dugdale, and now in possession of the Earl of Winchilsea, at Eastwell Park, Kent.

horn, and a similar horn is placed beneath the feet. The figure reposes on an altar tomb, in front of which are shields bearing the arms of Stanley (as already given), impaling *or* three chevronels *gules*. Above the figure is a sculptured bracket fixed to the wall, and the whole is surmounted by a depressed arch.

In order that no possibility of doubt might remain as to the prominent feature of this memorial, namely, its being unclothed from the waist upwards, I examined the drawing of the same monument in the Heralds' College volume of Dugdale's Visitation (C. 36). Here the drawing is in Indian ink only, but the muscles and other anatomical points are so clearly made out, that the absence of colour in no way diminishes the confirmation afforded by this evidence. The shields of arms are as before.

Now, as to the person commemorated. Pennant, in his "Journey from Chester to London," arriving at Lichfield, says, among other matters relating to the Cathedral, "I have a singular drawing of a tomb, now lost, of a knight naked to his waist; his legs and thighs armed, and at his feet and head a stag's horn; his hair long and dishevelled; a scroll in his hands, as if he was reading a confession or act of contrition. Across his middle, on his baslet, is his coat of arms, which show him to have been a Stanley. He is called Captain Stanley, and is said to have been excommunicated, but to have received funeral rites in holy ground (having shown signs of repentance) on condition that his monument should bear those marks of disgrace. I find a Sir Humphrey Stanley of Pipe, who died in the reign of Henry VII., who had a squabble with the Chapter about conveying the water through his lands to the close. He also defrauded the prebendary of Statfold of his tythes; so probably this might be the gentleman who incurred the censure of the church for his impiety." Shaw, in his "History of Staffordshire" (vol. i. p. 254), copies the drawing and the words of Pennant; and at pages 249 and 252 also he notices the tomb, adding that "in the base of the monument are four shields, and in the first and fourth this impalement, viz. the arms of Stanley impaling or, three chevronels gules (*Clare*)." In a note on page 254 he again speaks of the impalement of the Stanley and Clare coats. Dr. Harwood, in his "History of Lichfield," quotes the account of Pennant, adding:—"That Sir

Humphrey was a man of a turbulent spirit may be proved from an anecdote told of him by Pennant. In 1493 a spirit of rivalry had subsisted between the Stanleys of Pipe and the Chetwyndes of Ingestre. Sir Humphrey Stanley was one of the knights of the body to Henry VII.; Sir William Chetwynde was one of his gentlemen ushers. The former contrived to draw Sir William out of his house by means of a counterfeit letter, and while he was passing over Tixal Heath, caused him to be attacked by twenty armed men and slain on the spot; Sir Humphrey passing with a train at the instant, under pretence of hunting, but in reality to gratify his revenge with the sight" (p. 98).

The points here recorded are not many, but the errors are abundant. The drawing given by Pennant is totally unlike the monument. The monument itself, so far from being "lost," has never stirred from its ancient site. Sir Humphrey Stanley did not marry a Clare; and, whether he did or not, he was buried in Westminster Abbey, where his monumental brass remains to this day (as mild-looking a brass as ever came from the hands of a lattener). The only good point about the history is that it helps to confirm the curious fact of the knight being portrayed as naked to the waist.

Failing the terrible Sir Humphrey, the vengeful *miles pro corpore* of King Henry VII.,[1] the next claimant was Sir John Stanley, his son. But here again a bar was found; for Sir John Stanley did not marry a Clare, neither could it be discovered what Clare had ever married any Stanley. In short, the whole affair was such an imbroglio of Clare and Stanley and Stanley and Clare, of chevrons and bends-azure, of parti-per-pale and bucks' heads caboshed, that Rouge Dragon himself might well have turned pale at the contemplation thereof. However, by dint of search among the stores of the British Museum, in which the assistance of Mr. Sims of the manuscript department was of great value, this fact revealed itself,—that the arms of Clare were also the arms of Gerard. And then, turning to the "Account of the House of Stanley" published by Seacome in 1741, was found, following the notice of Sir Humphrey Stanley above mentioned, the following entry:—

"Sir John Stanley of Pipe married Margaret, the daughter

[1] He died 1505.

of Sir Thomas Gerrard, and by her had issue two daughters only, by which the male line of this most worthy house was extinguished" (p. 175).

This short notice is full of interest for the investigation now in hand. "Sir John Stanley of Pipe." Pipe is a domain about a mile from Lichfield, so that the family of our knight would naturally desire his interment in the cathedral of that city. The Gerards were seated in the north-west division of the county of Stafford, giving name to the village of Gerards'-Bromley, so that the lady was a neighbour of the "Stanleys of Pype;" and the circumstance of Sir John being the last male representative of his family precludes the possibility of any other claimant starting up to dispute possession of the Lichfield tomb. The arms thus assigned to the family of Gerard may be found in Harl. MS., 1458, fol. 135 verso, and again in Burke's Armory.

The last point to be noticed—and it is by far the most interesting—the representation of the knight on his monument as partially divested of clothing, and the facts implied by this representation, I leave to much abler hands than my own. I venture, however, to call attention to a point noticed by Dr. Milner in his description of the glass-picture representing the scourging of Henry II., reproduced in Carter's "Sculpture and Painting," pl. 37; that, in old times, "there was not any ignominy implied in scourging as a public penance: on the contrary, many royal personages have submitted to it, no less than Henry the Second" (p. 51). In the figure given by Carter the king is represented bare to the waist, undergoing flagellation by the monks of Canterbury. And again, in Montfaucon's "Monuments de la Monarchie Française," pl. 23, vol. ii., we have a glass-painting from the church of St. Denis, where Louis IX., in similar guise, is receiving the discipline from his "Dominican confessor." In the text Montfaucon tells us:—"Le dévot Prince se fait donner la discipline. C'est son confesseur Dominicain qui a fouette. Saint Louis a les épaules nues, un genou à terre, nules mains jointes. Il se confessoit tous les vendredis, dit les auteur, et après la confession il se faisoit toujours donner le discipline."

J. HEWITT.

SOME REMARKS ON THE STANLEY EFFIGY AT LICHFIELD.

By the VERY REV. CANON ROCK, D.D.

THE knightly figure of a Stanley yet existing in Lichfield Cathedral, being bareheaded and stripped of all clothing down to the waist, is not only an example of monumental sculpture of very rare occurrence, but appears to require some particular notice.

From the beginning the Church has everywhere followed the example of St. Paul,[1] and publicly shut out from her body all open and heinous breakers of her laws; and the words which, in most cases, she speaks while doing so, are borrowed from Holy Writ, in Deuteronomy, ch. xxviii. But like St. Paul, who threw open the door again to the young Corinthian,[2] after he had heartily sorrowed for, and broken off his incestuous intercourse with his father's wife, so the Church brings back to her fold the erring but sorrow-stricken sinner. To anyone who happened to die under the censure of unremitted excommunication, burial in hallowed ground and all Christian rites were forbidden. The case of Walter Earl of Essex exemplifies this discipline. That nobleman had plundered the church of Ramsey of its sacred vessels and vestments, and in consequence fell under the greater excommunication, the words of which may be found in Maskell's Monumenta Ritualia.[3] The narrative of the sequel is given thus by Dugdale :—"Post hujusmodi tandem excessibus aliisque multis his similibus, publicam anathematis non immerito incurrit sententiam . . . . Poenitens itaque valde et Deo cum magna cordis contritione pro peccatis suis supplicans, quantum taliter moriens poterat Deo et hominibus satisfecit, licet a præsentibus absolvi non potuisset. Illo autem in discrimine mortis ultimum trahente spiritum, quidam supervenere Templarii qui religionis suæ habitum cruce rubea signatum ei imposuerunt, ac deinde jam mortuum

[1] 1 Corinth., c. v. vv. 3, 4, 5.
[2] 2 Corinth., c. ii. v. 10.
[3] Maskell, Monum. Rit. Eccl. Anglicanæ, t. ii. p. 286.

secum tollentes et in pomerio suo, veteris scilicet Templi apud London, canali inclusum plumbeo in arbore torva suspenderunt. Post aliquot vero tempus . . . . à Papa Alexandro more taliter decedentium meruit absolvi, inter Christianos recipi, et pro eo divina celebrari."[4]

Our English rubric for taking off this excommunication was the same as that which then existed and still exists all over Christendom; it is thus given in Maskell's Monumenta, above quoted, t. ii. p. 303:—"Deinde consuetum est ut fiat absolutio (a majori excommunione) hoc modo. Excommunicatus, vestibus suis spoliatus, ponat se ante januas ecclesiæ prostratum, vel flexis genibus coram illo qui debet eum absolvere; qui absolvens, alba vel superpelliceo cum stola indutus, teneat virgam in manu sua, dicendo totum et integrum psalmum, *Miserere mei Deus secundum magnam misericordiam tuam*, cum *Gloria Patri*, et *Sicut erat*. Interim verberando poenitentem cum virga, videlicet percutiendo eum semel in quolibet versu vel magis vel minus, levius vel acrius secundum quantitatem delicti," &c., ib. p. 303.

In the rubric which occurs in a continental form, the following may be found:—"Post hoc secundum modum culpae poenitentiam ei injungat, et litteras per parrochiam dirigat ut omnes noverint eum in societate Christiana receptum."[5]

No one, high or low, is exempt by the canons from the sentence of excommunication. Many who have visited Milan may have called to mind while there, how, at its old cathedral door, St. Ambrose, with hand uplifted in mild sternness, excommunicated the Emperor Theodosius for the blood which, in his fury, he had shed at Thessalonica; and though in imperial state, with a crowd of courtiers about him, that prelate forbade him to cross the threshold.

In this country Henry II., at the end of his penitential pilgrimage to Canterbury, underwent a scourging upon his naked shoulders by the hands of the monks of Christchurch:—"Nudus pedes . . . ad ecclesiam majorem pervenit (rex), absolutionem petiit, carnemque suam nudam disciplinæ virgarum supponens a singulis viris religiosis, quorum multitudo magna convenerat, ictus ternos vel quinos excepit."[6]

[4] Mon. Anglic., t. iv. p. 142, ed. Caley.
[5] De Antiquis Eccl. Ritibus, Lib. iii. cap. iv. t. ii. p. 325, ed. Martene.
[6] Wendover, Flores historiarum, ed. Coxe, t. ii. p. 378.

This scene is figured in stained glass now in the great east window at the Bodleian Library, Oxford. For a small theft of a sacrilegious kind, men were sometimes whipped before the high altar in a church. That delightful book written by the monk of Durham, Reginald, affords us this example of a priest's servant being so punished by his master:— "Sacerdos . . . ipsum (dapiferum suum) manu comprehendens in ecclesiam Beati Cuthberti introduxit, et temerarium scelus et peccati facinus confitentem, quantum potuit, absolvit. . . . Quem flagris coram altari pro poenitentia multavit."[7]

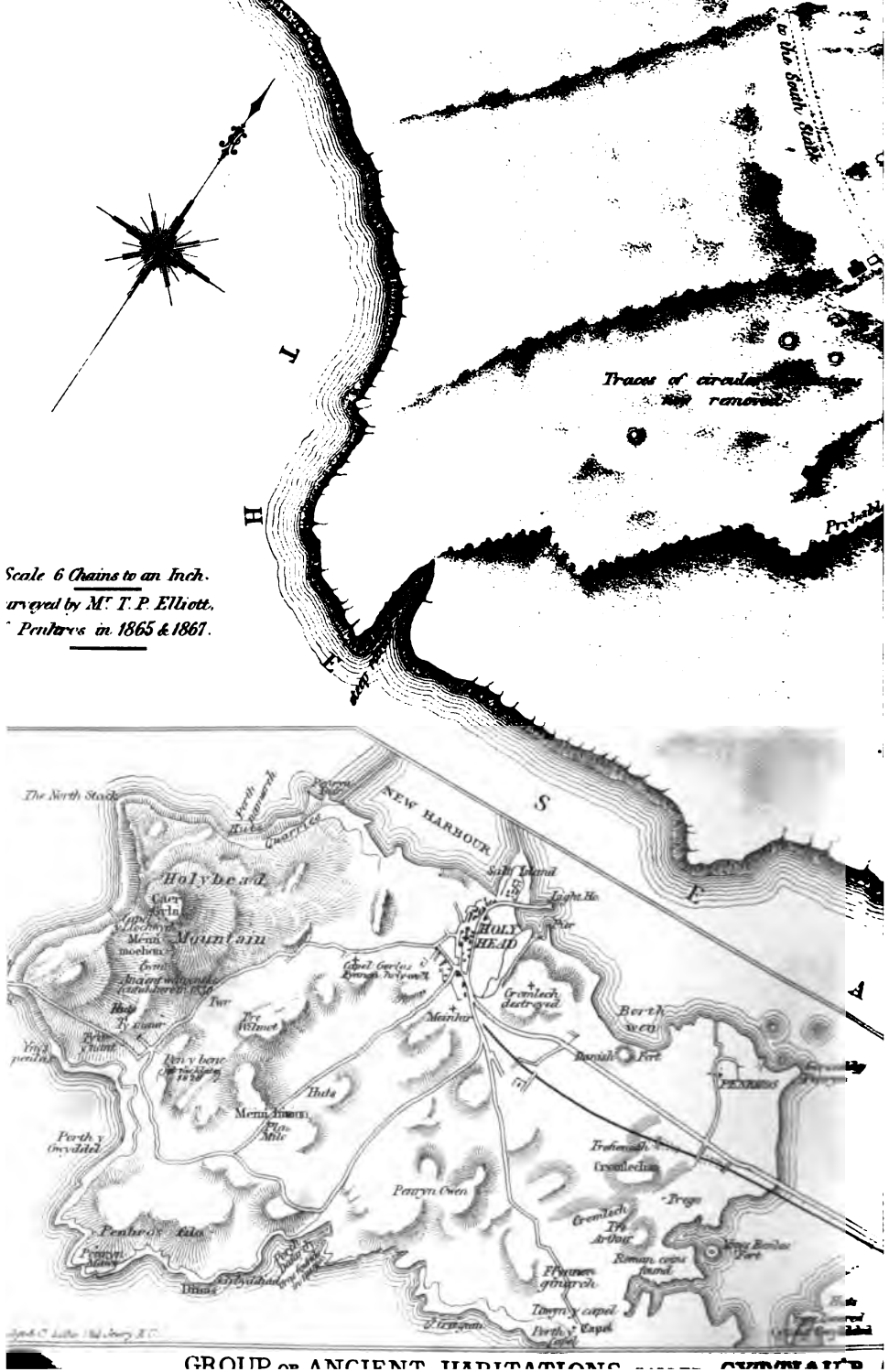
The shedding of blood in a church, while it desecrated the building, and stopped the celebration of service in it till the ceremony of reconciling had been gone through, brought down the greater excommunication on the delinquent:— "Sanguinis effusio a cunctis horribiliter deploratur. . . . . Factum permiserabile episcopo denunciatur, et in crastino reconciliata ecclesia reus absolvitur."[8] The bleeding from the nose, through a wrathful blow struck on a sudden, would cause this, as we find by some curious documents given in the Depositions and Ecclesiastical Proceedings published by the Surtees Society, pp. 10, &c.

With all these evidences before me, to my thinking, this Stanley, of knightly rank, had drawn down upon himself the greater excommunication through the spilling of blood in Lichfield Cathedral on some occasion, from a blow on the face with his hand, or possibly by a slight stab with his anelace, on the person of one with whom he had quarreled. He lies bare-headed and naked as far down as the girdle. His upraised hands, according to the representation given by Pennant and copied in Shaw's History of Staffordshire, held a scroll, which must have been the document noticed above, signifying, under the bishop's hand, that, having undergone the canonical penance, the offender was again admitted to all Christian privileges.

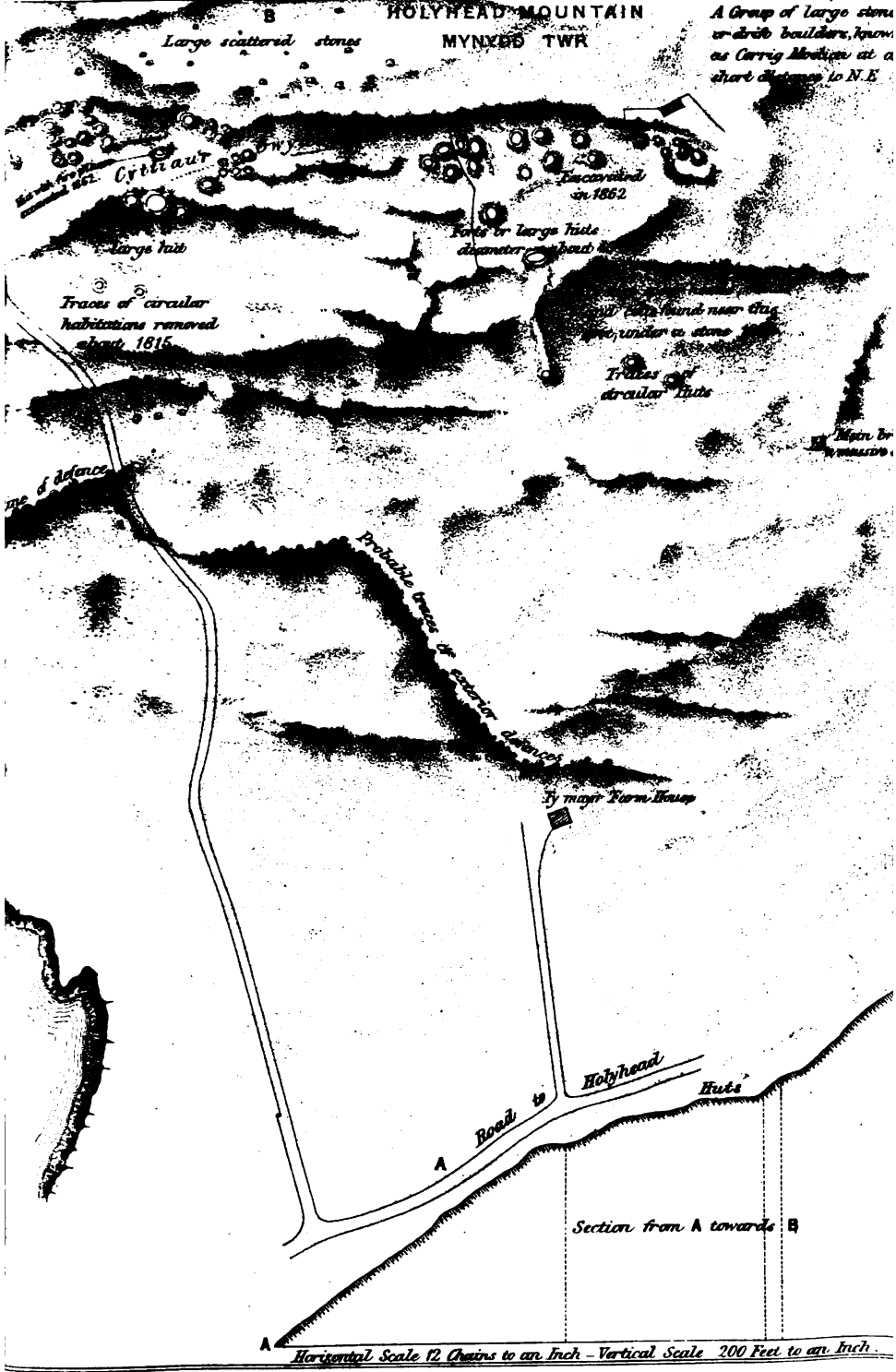
The rite of scourging is still followed, and, while I was a student at Rome, I saw it performed upon the bare shoulders of two policemen; they had wounded a criminal who, while being led to prison, made his escape, and ran into a church.

[7] Reginaldi Dunelmi Libellus de Admirandis Beati Cuthberti, p. 148.

[8] Ib. p. 120.



GROUP OF ANCIENT HABITATIONS


B
HOLYHEAD MOUNTAIN
MYNYDD TWR
Large scattered stones
A Group of large stones or druid boulders, known as Carrig Mordigan at a short distance to N.E
Excavated in 1862
Large hut
Traces of circular habitations removed about 1815
Traces of circular Huts
Probable traces of circular dwellings
Ty mawr Farm House
Holyhead
Huts
A
Road to
Section from A towards B
A
Horizontal Scale 12 Chains to an Inch – Vertical Scale 200 Feet to an Inch

ON THE REMAINS OF THE ANCIENT CIRCULAR HABITATIONS IN HOLYHEAD ISLAND, CALLED CYTTIAU'R GWYDDELOD, AT TY MAWR, ON THE S.W. SLOPE OF HOLYHEAD MOUNTAIN.

By the Hon. WILLIAM OWEN STANLEY, M.P.

In many parts of Anglesey, but particularly near Holyhead, are to be seen in rough and uncultivated districts of heathy ground, over which the plough has never passed, certain low mounds, which on examination are found to be formed of a circular wall of stones, but are now covered with turf and dwarf gorse or fern. These walls generally enclose a space of from 15 to 20 ft. in diameter, with a doorway or opening always facing the south-west, and having two large upright stones about 4 or 5 ft. high as door-posts. These sites of ancient habitations are usually in clusters of five or more, but at Ty Mawr on Holyhead Mountain they form a considerable village of more than fifty huts, still to be distinctly traced. These villages are usually placed in positions sheltered by rising ground from the north-west winds, and are generally protected from hostile attack by rude walls of dry masonry or by precipitous rocks. Such remains of circular habitations have, time out of mind, been called Cyttiau'r Gwyddelod, or Irishmen's Huts; but, as Rowlands in his Mona Antiqua observes, this is a vulgar error, if by Gwyddelod be meant the inhabitants of Ireland, who never inhabited Anglesey so as to have left any remains of their creals and cottages behind them, seldom staying long in it: but, "if by Gwyddelod be meant aborigines, the first inhabitants, as it is not unlikely it may, for the two words that make up that name are purely British, viz. Gwydd and Hela, *i.e.* wood-rangers, perhaps the common appellation of the aborigines, lost with us and retained only by the Irish, then the objection falls to the ground, and the instance confirms the conjecture that they are the remains of the first planted

habitations while they were destroying the woods and cultivating the country."[1]

In connexion with the supposed tradition that would ascribe these sites of dwellings to Irish occupants, I may refer to a very interesting memoir in this Journal, on the Cloghauns, or ancient habitations, of a similar nature, in the County of Kerry in Ireland, by Mr. G. V. Du Noyer, who states that the Rev. C. Graves, D.D., now Bishop of Limerick, informed him, during the meeting of the British Association at Dublin in 1857, "that he was acquainted with a Welsh poem of undoubted antiquity and authenticity, wherein was given a description of the earliest stone houses erected in Wales. It was stated that in the time of Caractacus, the Welsh cut down all their great forests in order to render their country less tenable to the invading Romans; and, as they had hitherto constructed their houses of wood, when this timber failed them they adopted the Irish form of stone houses, that of the bee-hive, constructed of dry masonry, a mode of building hitherto unknown in Wales. This interesting record fixes the date of the Welsh Cloghauns, and affords us strong evidence of the antiquity of that form of house in Ireland."[2]

We have also numerous vestiges of such ancient habitations in various parts of England, amongst which may specially be cited a similarly constructed bee-hive hut, to be seen in Cornwall, at Bosphrennis, in the parish of Zinnor.[3]

The circular form for their dwellings seems to have been almost universally adopted by the earliest races of men in all countries. The nomad tribes of the East, the earliest of all, formed their circular tents with a few poles, probably covered with skins before the invention of cloth made of camel's hair, removing their tents from time to time as they required fresh pasture for their flocks and herds. The

[1] Rowlands, Mona Antiqua, p. 27.

[2] Archaeol. Journal, vol. xv. p. 22. A writer in the Archæologia Cambrensis, vol. v., third series, p. 307, criticised somewhat severely the suggestion received from the learned prelate, as above stated, by Mr. Du Noyer, whose reply is given, *ibid.* vol. vi. p. 148, where he cites as his authority the curious Tale published in the Iolo MSS. by the Welsh MS. Society, entitled "The Account of Caradoc." The Poem is doubtless, as Mr. Du Noyer observes, not of "undoubted antiquity;" but the description given in it of the bee-hive stone hut is so perfectly applicable to that of the clogh-aun, that it well merits the attention of the antiquary.

[3] Arch. Camb. vol. ix., third series, p. 120.

savage tribes also of Africa, the wild Indians of America, the Islanders of the Pacific, the inhabitants of New Guinea, who construct circular houses on platforms over the water, like the ancient lake-dwellers on the Swiss lakes, the Esquimaux, with his ice-formed hut, and the Lapp, all adopt the circular form to this day. An ancient race of men scooped out circular holes in the chalk and gravel near Salisbury, covering the top with wattle and baked clay. When man in his rude state only required shelter from the heat or inclemency of the weather, the circular form was the easiest of construction, and also that best suited to resist the force of wind and rain, or even the attacks of wild beasts. The one entrance gave sufficient light, and the cooking was either conducted outside in pits, or the boiling was contrived within the hut, by means of hot stones, heated outside the dwelling and then placed in a raw skin filled with water, or, as civilization gained ground, in rude earthen vessels, which, in early times, may not have been sufficiently hard and well baked to bear exposure to the open fire.

In the autumn of 1862, Mr. Albert Way being with me at Penrhos, I directed two or three of the circular huts at Ty Mawr to be cleared of the turf and stones from the fallen roof which filled the interior. On clearing out one of the most perfect of these circular mounds, which stood by itself apart from the other clusters of huts, we found that the interior had been divided across the centre by a line of flat stones placed upright in the ground on the floor of the hut. They were about 2 ft. high, and 2 in. thick; there was a passage left in the middle, and to the right, on entering the space inside this division, there was a square fire-place, formed on two sides by flat stones or jambs placed at right angles to the division before mentioned, and forming the back of the fire-place. It was about 18 in. wide, and 2 ft. deep, open in front. When first discovered, it was half filled with round stones and flat pebbles about the size of the hand, which had been collected from the sea-shore; all these had the undoubted marks of having been heated in the fire. There was also the appearance of great heat having been applied to the sides and back-slab of the fire-place, but we noticed no remains of charcoal or ashes mixed with the stones. On the right of the fire-place, in a niche made in the outer wall of the hut, we found some handfulls of limpet and periwinkle shells, no

doubt relics of the food of the inmates. A saddle-shaped quern of coarse grit (see woodcuts), and two rubbing-stones or grinders of the same grit-stone, were found on the floor of the hut; also a small perforated circular stone, about one inch in diameter, of the kind usually supposed to have been whorls for spinning. A core of hard trap had the appearance of having been chipped to obtain flakes for arrow-heads; and here and there other stones had indications on them, as having been used as hones for sharpening celts or other instruments, for pounding substances used as food, or breaking bones to extract the marrow. All these relics seem to indicate a Stone Age of very early date. No fragments of pottery or iron were found.

In the other huts excavated there was no sign of any division in the centre or of any fire-place.

In the year 1832, the tenant of Ty Mawr farm, Hugh Hughes, on removing some of the large stones near the huts, found underneath them a considerable number of bronze spear-heads of different forms and sizes; also well formed bronze celts, axe-shaped and socketed, with rings of various sizes, armlets, and a great many red amber beads. Representations of the most interesting of these relics accompany the present memoir.[4]

The situation of this village is on the south-west slope of Holyhead Mountain, above Ty Mawr farm, and extending from the road and gate leading to the South Stack Lighthouse, about 600 yards towards the east. It is well sheltered from the north by a steep face of rock and the flank of the mountain. An accurate survey has been made by my agent, Mr. T. P. Elliott: about fifty circular huts are easily traced, as marked on the plan, but there are indications of many more which have been nearly obliterated by the cultivation of the land and by removal of the stones for building walls as fences. These dwellings are placed—some singly, some clustered together—without any regular plan; some have smaller circular rooms attached, without a separate external entrance, similar to those described in the Kerry cloghauns, which the Irish call dog-kennels, and very

[4] The discovery has been noticed in this Journal, see vol. vi. p. 237; and in the Archæologia, vol. xxvi. p. 483. It deserves notice that a stone mould for casting spears and celts of similar fashion to some of those disinterred at Ty Mawr has occurred in Anglesey; it was found between Bodwrdin and Tre Ddafydd, and is figured in this Journal, vol. iii. p. 257.

Hut-Circle, one of the Cyttiau'r Gwyddelod, at Ty Mawr, on Holyhead Mountain; on the estates of the Hon. W. O. Stanley.

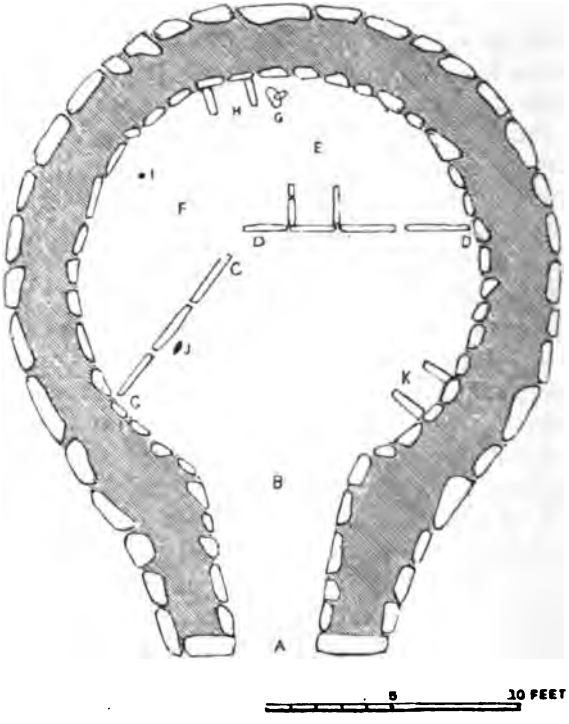
Excavated in 1862.

probably the dogs for the chase were kept in them. The entrance is always facing the south-west, and many of the large upright door-posts are still standing.

The village is placed on a flat terrace of ground, about 60 yards wide on the north-east, but double that width on the south-west. An almost perpendicular cliff, about 25 ft. high, defends it on the mountain side to the north. The ground falls, in several gradual slopes, towards the south, from which there is a grand view over Anglesey, bounded by the Carnarvonshire range of mountains, from Bardsey to Penmaen Mawr, Snowdon with its triple head towering in the centre. The sea, with the Irish coast and the Wicklow mountains frequently visible, bounds the west.

Advantage had been taken to defend the village against hostile attack from below. Each slope has terminated in small rocky ridges, which have been strengthened by a double wall of rough stones, as is common in most of the fortified places in Anglesey and Carnarvonshire; flat stones being fixed in the ground in two rows, and smaller stones built in between. On each flank of the village there is a rather steep conical rock, also with the appearance of having been strengthened by a surrounding wall at the base; and on the larger one to the west there are the remains of circular dwellings. These two mounds, thus fortified, defend each flank of the village. On the east end, where the huts cluster thickest, are two well-formed natural bastions, also strengthened by a wall, and between them a grassy slope leads to the lower terrace, apparently enabling the inhabitants, if forced from the lower slopes, to retreat under cover of these defences into the main stronghold.

There are traces moreover of a line of defence which I have noticed at Inys Benlas, a remarkable detached rock on the shore to the south-west of the huts, by Tyn y Nant, crossing the road above Ty Mawr farm-house, and thence by the East end of the village of Cyttiau, along the mountain ridge to Meini Meilion, which is indicated in the Ordnance Map as the site of ancient vestiges, and thus to the precipitous parts of the mountain with the remarkable stronghold on its summit. These traces are indicated by Mr. Elliott in the survey that accompanies this memoir. Possibly they may have some connection with the ancient approach from the shore, which is mostly hemmed in by cliffs and unap-



Ground-plan of a Hut-Circle at Ty Mawr, excavated in October, 1862.

A. Door-posts and entrance, width 3 ft. B. Passage into the hut, width 6 ft. C C, and D D. Partitions of upright slabs. E. Cooking chamber and fireplace. F. Chamber at the corner of which lay a grinding stone. G. near a fireplace, as supposed. H. also a spindle whorl. I J. A second grinding stone. K. Supposed fireplace.

From measurements by Mr. T. P. Elliott, of Penrhos.

proachable rocks along the Western side of Holyhead Island. The most convenient landing-place in this part of the coast may have been at Hên Borth, immediately below the group of hut-circles; a little farther to the South there is a small dangerous bay, shown in the Ordnance Map, and called Porth y Gwyddel. The natural landing-place on the West coast of the Island, however, seems to have been at Porth Dafarch.

No one can examine the whole position without being struck with the skill evinced in the selection of this site for these habitations, and the way in which it is protected against hostile attack; particularly if we take into consideration the rude weapons of offence in those early times, before the invention even of bows and arrows. More recent examination of the ground leads to the belief that the protecting line of defence extended from the steep cliffs above the sea, on the West, to a precipice of the mountain on the East, thus placing the village in connection with the strong fortified camp on the summit called Mur Caswallon.

I am inclined, with Mr. Rowlands, to give a very early date to these structures, and to think that the people who first inhabited these huts were not the Irish rovers, but the aboriginal race of men who first peopled Anglesey. It is, however, probable that these villages were inhabited until much later times; and, as is proved in similar habitations near the Menai, examined by Mr. Wynn Williams, as noticed hereafter, were occupied by the Roman invaders in the first century. The Irish, we know, made their incursions into Anglesey frequently during the third and fourth centuries, until finally driven out by Caswallon; he defeated their chief, Cerigi, who was killed at Holyhead A.D. 450. Up to the year 900, the Irish and Danes made frequent raids into Anglesey, but it does not seem certain that they ever formed a permanent settlement in the island.

It will be observed, on reference to the description of the Irish cloghauns by Mr. G. V. Du Noyer, that he could never find any trace of a fire-place or a window. Dr. Petrie, in his Inquiry into the Round Towers of Ireland,[5] attributes

[5] The Ecclesiastical Architecture of Ireland, anterior to the Norman Invasion; pp. 124, 126. See also Dr. Petrie's Essay on the Ancient Military Architecture of Ireland, where the mode of construction used by the earlier colonists is described.

the erection of the circular cloghauns to the Firbolg and Tuatha de Dannan tribes who inhabited the country long prior to the introduction of Christianity.

On examining the present state of the Cyttiau'r Gwyddelod, it is difficult to decide with certainty whether the huts were built in bee-hive form with a stone roofing, like the Irish and Cornish huts, or covered with timber poles and sods over them; some persons are inclined to think, from the quantity of stones that have fallen into the huts, that they may have had stone roofs formed of slabs "stepped over," according to the technical term, or overlapping each other and forming a rudely fashioned but very durable dome.

From the small dimension of the huts—15 ft. to 20 ft. in diameter inside—it is hardly possible to suppose that the hut opened in 1862, with a division in the centre, could have been used as a dwelling-house; and from the absence of any appearance of a division, or of a fire-place, in the others, I am inclined to think that they used certain huts set apart for cooking—as do at the present time the negroes in Jamaica, who always have huts separate. It has been lately stated that "the negro never cooks in his hut; his fire-place is in the open air, close to his hut; or he has a small kitchen as an outbuilding in his yard."[6] The gipsy also has his fire outside the tent.

Tylor, in his Early History of Mankind, p. 262, informs us that the Assinaboins, or stone-boilers, dig a hole in the ground, take a piece of raw hide and press it down to the sides of the hole, and fill it with water: they then make a number of stones red-hot in a fire close by, the meat is put into the water, and hot stones dropped in until it is boiled. In Ossian's Fingal we read:—"It was on Cromla's shaggy side that Douglas placed the deer, the early fortune of the chase. Before the heroes left the hill, a hundred youths collect the heath; ten heroes blow the fire; three hundred chuse the polished stones." This passage is thus explained in a note by M'Pherson:—"The ancient manner of preparing feasts after hunting is handed down by tradition. A pit lined with smooth stones was made; near it stood a heap of flat stones of the flint kind. The stones as well as the pit were properly heated with heather; they then laid the venison at the bottom, and a stratum of stones above it,

[6] The "Times," April 12, 1866.

and this they did alternately until the pit was full; the whole was then covered with heath to confine the steam."[7]

It is almost useless to multiply instances, such as the mode by which the South Sea Islanders and other nations cook their pigs and animal food.[8]

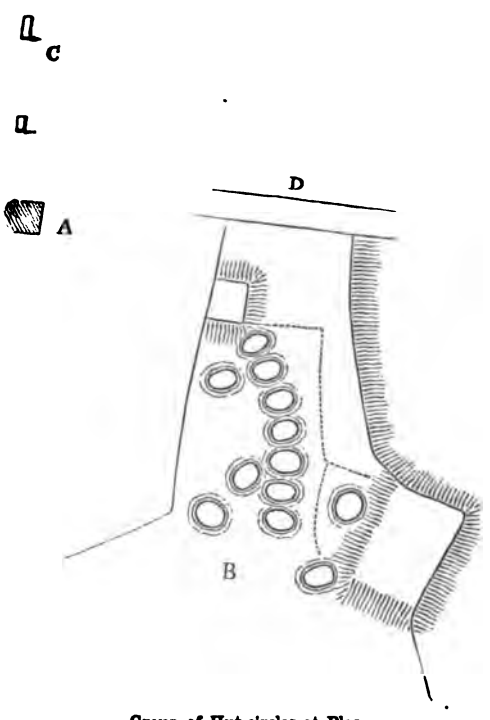
The peculiar form of fire-place discovered in the hut at Ty Mawr, the round and flat stones half filling it, large heaps of stones outside the hut, all bearing marks of having been intensely heated in fire—just those which would be used for stone-boiling or cooking in pits—all would point out that such had been the custom of cooking their food practised by the early inhabitants of these huts. If we consider the small size of the dwellings, and if like the Irish and Cornish huts they had no aperture at the top, it would have been almost impossible for the inmates, without suffocation, to have made a fire inside of wood, heath, or gorse. We may therefore conclude that the larger animals were cooked in pits outside, but that shell fish, or small portions,were boiled or roasted on hot stones, and that such grain as they possessed was roasted, and ground by the querns, inside the dwelling.

The remains of four of these clusters of huts are or were to be seen near Holyhead; namely the one here described at Ty Mawr; another, at Porth Namarch (Ordnance Map), on the north-east side the mountain, now destroyed by the extensive quarries for the Breakwater; and a rather large colony at Inys Llyrad (the Island by the Ford), on the Anglesey side of the Penrhos river, halfway between the Stanley embankment and the Four-mile Bridge. This island at high water is quite surrounded by the sea, and two hundred years ago it was the only approach to the Island of Holyhead at low water, by crossing the ford below to the Mill Island, on the Holyhead side of the stream. There is a small steep conical island, about a mile S. W. of Ty Mawr, called Inys Benlas, or Inys Swyddog (the Soldiers' Island). It bears the appearance of having been used as a fortified post, and, from the large number of loose stones which have been collected at the top, may afterwards have been a cairn

[7] The "milk stones," described by Sir C. Jervoise, Bart., in Arch. Journal, vol. xx. p. 371, may be vestiges of some similar practice amongst the ancient inhabitants of Hampshire.

[8] See Sir J. Lubbock's Prehistoric Times, p. 380, and Tylor's Early History of Mankind, p. 266, &c.

or burial-place, or perhaps a watch-post for fire-signals to warn the Ty Mawr village of hostile attacks. There is also the appearance of a small cluster of huts at Plas, in lower ground, about half a mile to the South of that place, but recent cultivation has nearly obliterated all the circles. There seem to have been huts both of square and circular form; this ancient village has been strongly protected by natural ravines and stone walls. Here also are two large upright stones, or Meinihirion, about 11 ft. high. Tradition says that a large coffin was found between them, composed of several flat stones and enclosing remains of bones, with spear-heads and arrow-heads, but I am unable to obtain accurate evidence of the facts.



Group of Hut-circles at Plas.

A. Farmhouse at Plas. B. Hut-circles and earth-works. C. Erect stones or Meinihirion (height, 11 ft.). D. Road to Holyhead.

If we suppose all these four villages to have been inhabited at the same time, giving five persons to a family or hut, and that there were 200 huts, we should have a large population for so small a district; probably at that time proximity to the sea gave the means of subsistence, and the interior of Anglesey was dense forest, bog, and waste land, when the Romans invaded it.

That the bronze weapons found in the huts at Ty Mawr, being objects mostly of Irish type, should be regarded as a convincing proof that they were inhabited by the Irish

rovers, may, I think, admit of a doubt. The discovery might be explained (as they were all found in a heap in one spot) by the conjecture that they were the spoils of the Irish after some defeat—perhaps that of Cerigi at Holyhead, by Caswallon. Still we must remember that moulds have been found in Anglesey for casting spear-heads and celts of the same form as these found at Ty Mawr.[9]

On the summit of Holyhead Mountain are the remains of a wall of defence, composed of very large unhewn stones, from 10 to 15 ft. high, in places where the natural face of the rock is not sufficiently precipitous. It has a well-constructed and defended entrance facing the south-east. The wall is called Mur Caswallon, and is marked in the Ordnance Map as Caer Gybi. It enclosed a space of sixty or more acres, and probably was the place of refuge against invaders, the cattle being driven up there for safety. The Romans may have used it, as some gold coins of Constantine were found on the east side of the fortress, about 1820, by a person digging turf. At Penrhos, in 1852, a small copper coin, also of Constantine, was found a foot below the surface of the ground. The reverse, under two armed soldiers with helmets and spears, each with a trophy before them—TRS. and GLORIA EXERCITUS—denotes that the coin was struck at Treves in honour of the victorious army. Several other vestiges of the Romans have been found from time to time near Holyhead.

Just below Ty Mawr, at Pen y Bonc, a curious jet necklace was found in a rock-grave (see the accompanying woodcuts).

The Rev. W. Wynn Williams has examined and described several circular habitations and fortified places near the Menai.[1] One, at Porthamel, on the top of a limestone rock, is defended by a wall through which there is a well-defined entrance; within are 16 or 17 circular huts or foundations; another group exists at Llangeinwen.[2] All these habitations and camps have certainly been used by the Romans, as coins and Samian pottery are found on excavation. It is highly probable that the Romans took advantage of these fortified villages to shelter and defend themselves

[9] See Arch. Journal, vol. iii. p. 257; vol. vi. p. 358.

[1] Arch. Camb. vol. iii. N. S. p. 209.

[2] Ibid. vol. ix., third series, p. 278.

from the natives after their battle on crossing the Menai Straits. Probably the island was held in subjection by small detachments on the Menai, also at Holyhead and its neighbourhood close to the sea. No remains, that I have heard of, are found of any villa or permanent abode. A Roman road crosses Anglesey from Porthamel to Holyhead, by Four-mile Bridge, near which is Caer Helen, a Roman camp. It is believed that the Romans worked the Amlwch copper mines. Old workings have been found, and stone boulders from the sea shore, now in the British Museum, for breaking the rock. It is probable that the miners lighted fires of brushwood; when the rock was heated, they threw water upon it, and with these stones detached the rock. The only object of metal known to me as having been found is a small pointed piece of bronze in old workings at Llandudno; it was sent to me by Lady Erskine of Pwlycrochan, near Conway, and was exhibited by her permission at a meeting of the Institute in 1850.[3]

The Romans brought no doubt a certain amount of civilization with them; but in ancient records we read that after the Romans left the country the Druids returned to Mona, and exercised their Pagan rites of worship, when driven by the early dawn of Christianity from other parts of Britain. About the year 600 St. Kybi was established at Holyhead,[4] with other anchorites, who may probably have founded the numerous chapelries, Capel y Llochwyd near the top of the mountain, towards the precipitous northern side of the Island,[5]

[3] Possibly the end or tip of a small ingot. See notices of this and other relics of metallurgical operations in North Wales, in this Journal, vol. vii. p. 68. In the Museum of Practical Geology, Jermyn Street, London, there is a stone maul from the Old Mine, Nant-yr-Arian, Aberystwith; also a number of stones with shallow basins and "buckering" stones, for pounding ore. These are from ancient workings in Cardiganshire.

[4] A.D. 580, St. Kebius flourished and founded a monastery at Caer Guby. See notices in Dugdale's Monasticon: edit. Caley, vol. vi. p. 1475.

[5] The site of Capel y Llochwyd (loxwyd, wilderness) is now marked by a heap of shapeless ruins. Not far distant there is a remarkable precipitous gulley, or crevice, through which a dangerous path descends to a spring of fresh water near the shore. The spot is indicated in Speed's Map, 1610—"Chap. Yloughwid." Amongst many wild traditions connected with this singular place may be mentioned that of a gold image of a female, with one arm, concealed amongst the ruins of the Chapel; to this popular fable very probably the total overturning of the remains of the little building may have been due. No trace of wall can now be recognised. The deep crevice in the cliff may have served for escapes or for secret access from the sea to the great fortress on Holyhead Mountain, to which it might form a sort of covered postern. Moreover, the remarkable supply of fresh water to be thus obtained could not fail, in times of extremity, to be of much value either to the anchorite or to the occupant of Mur Caswallon.

Llan Saint Fraid at Towyn y Capel,[6] Capel Gorlas, and Capel Gwyngena.[7]

The singular burial mound at Towyn y Capel, on the margin of a little bay on the western shore of Holyhead Island, has been described in a former volume of this Journal. The large number of skeletons there accumulated in successive tiers, and being it is believed those of adult males only, suggested the inference that they had there been slain in some deadly conflict. It was stated that the corpses had been deposited, not in parallel rows, but radiating from the centre of the mound. It is desirable to correct the erroneous impression thus formerly entertained in regard to the interment. The mound, having subsequently become breached by violence of storms, has wholly perished, and the graves have from time to time been seen on all its sides. They may have been about 400 in number. The bodies had all been placed with the heads towards the west.

Holyhead town, it is believed, was pillaged and burnt by the Irish and Danes about A.D. 900.

With regard to these early habitations of man, of which I have endeavoured to describe so remarkable an example in the foregoing observations, nothing is more difficult than to attempt to fix a date. At Ty Mawr we find only the rudest form of stone implements for the purpose of crushing grain and preparing food, and the remains of shell-fish; also bronze weapons with ornaments concealed in a heap under a stone, which is by no means an unusual circumstance.

The only guide that we have to approximate to the age when these early habitations may have been occupied, will be the nature and substance of the articles found on excavation. We may thus divide the periods. First, the rudest form of stone implements almost entirely used for crushing or pounding food, with a total absence of any sort of pottery or weapons of offence. Next we have rude remains of pottery, bronze and stone weapons, with flint arrow-heads, by their form adapted for the defence of man against hostile

[6] Arch. Journ., vol. iii. p. 226. In the map engraved by Hondius, 1610, and given by Speed, this remarkable spot is shown as "Llaussanfraid," namely, church of St. Bride, by whom doubtless the small oratory on the summit of the mound was dedicated.

[7] Is not this the ancient name of Rhoscolyn—Gwainfain, as mentioned in an old document, *t.* Edward IV?

attacks of man, and also for the destruction of savage beasts or the larger animals for food.

At a later period we find, at Fisherton near Salisbury, in the caves of the South of France, and the Pfahlbauten of the Lakes of Switzerland, a higher state of civilisation; pottery with some attempt at ornament, rude drawings of animals on bones, nets, also twine, needles for sewing, barbed arrow and spear-heads, very similar to those still used by the Esquimaux or South Sea Islanders. Yet, in the vestiges near Salisbury, the relics of the Lake-dwellers in Switzerland, or in those of the inhabitants of the caves in France, we do not recognise weapons of war.

In many of these early habitations in England and Wales, Scotland and Ireland, there is all the appearance of successive occupation, more particularly exemplified in the recent excavations of ancient subterraneous structures by Mr. S. Laing, M.P., in Caithness, the lowest portion of which exhibits the features of the Cyttiau in Wales, such as rude stone implements and remains of shellfish.

We may, I think, surely place the probable occupation of these Holyhead habitations in the earliest of these periods.

With these few remarks, I must leave this interesting question to be solved by others more experienced and more learned than myself.

NOTICES OF RELICS FOUND IN AND NEAR ANCIENT CIRCULAR DWELLINGS EXPLORED BY THE HON. W. O. STANLEY, M.P. IN HOLYHEAD ISLAND.

THE vestiges of habitations of the early occupants of the British Islands present possibly a greater amount of instructive evidence than any other class of pre-historic remains, with the exception only of sepulchral depositories. They have, however, been little appreciated; it is only in very recent times that circular hut-foundations, pit-dwellings, the strange subterranean structures that abound in many districts of our country, where such traces of its ancient inhabitants have not been effaced by the progress of agriculture and improvement, have at length been systematically investigated. Having been so fortunate as to witness the examination of the hut-circles on Holyhead Mountain, the lively interest with which I have followed Mr. Stanley's researches enhances the gratification that I feel in offering a few remarks on certain ancient relics discovered at Ty Mawr, as related in the memoir for which the Institute is indebted to his kindness.

The excavation carried out in the autumn of 1862 was comparatively unproductive as regards the relics brought to light, which are inferior in variety and interest to those, hereafter noticed, previously obtained in the immediate neighbourhood. It is remarkable that no trace of metal, no weapon or personal ornament was noticed in the explorations; they were, however, repaid by the suggestive evidence that we obtained regarding the internal arrangements of such primitive dwellings, and the daily life of their occupants. It must be remembered that the mere rudiments of the hut-circles had been spared, concealed in shapeless hillocks that had long served as stores of material for any required purpose, in preference to the more laborious resource of quarrying stone on the adjacent mountain. I was assured by the old tenant, Hugh Hughes, that he well remembered

the circular walls of some of the cyttiau standing as high as his shoulder; they had been heedlessly demolished to form the adjacent fences on the farm, to which he came in 1814.

The first remarkable relic disinterred was one of the primitive stone appliances for triturating grain (see woodcut, fig. 1); it lay in the part of the dwelling that appeared

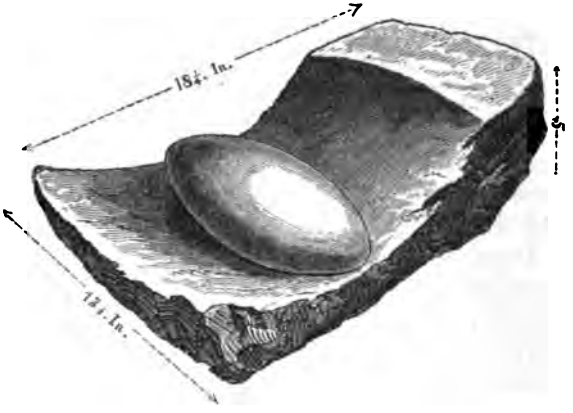


Fig. 1. Grinding-stone and muller found in the Hut-circle, Ty Mawr.

to have been a cooking-place, and consisted of a slab of coarse-grained stone, the mill-stone grit possibly obtained near Bodorgan, in Anglesey, measuring 18¼ by 13½ in., the greatest thickness being about 5 in. Its upper surface was considerably hollowed away in the course of grinding; an oval rubber, measuring 12 by 5 in., flat on one face and convex on the other, lay near it. A second similar "runner" or grinding-stone, of granite, measuring 9½ by 3¼ in. was subsequently found. The simplest and doubtless most ancient mode of preparing any grain for food was by crushing it, probably after being parched, between two stones; convenience must soon have suggested that the lower stone should be hollowed, so that the grain might not escape, and that the muller should be so shaped as to be readily held and passed backwards and forwards by the hands.

It has been truly observed by Sir W. R. Wilde, in reference to such a primitive appliance, that "when we consider the immense length of time that all nations, acquainted with the use of corn, have known how to work the rotary quern,

this must be indeed an implement of extreme antiquity."[1] It were of no slight interest if we could ascertain what were the earliest cereals cultivated in Anglesey, and ground for the food of the occupants of the cyttiau under consideration.[2]

Some examples of "grain-crushers" resembling that found at Ty Mawr have occurred in Anglesey. One, of precisely similar fashion, was exhibited at the Bangor Meeting of the Cambrian Archæological Association by the Rev. W. Wynn Williams; it is figured in their Journal.[3] The two portions of this object were found together in a wall on the land of Tre-Ifan, near the River Braint in Anglesey; this wall on one side forms the boundary of a village or group of cyttiau. Mr. Williams had found no other perfect specimen; but he possesses not less than sixteen portions of the lower stones, and eleven of the rubbers, some of them adapted for grain-crushers of larger size than that above-mentioned, the dimensions of which are as follows:—Lower stone, length 19 in., breadth 13 in., thickness 8 in.; upper stone, length 16½ in., greatest breadth 7½ in., thickness 3½ in. This last is carefully tapered, both ends alike. On one of the broken lower stones there is a shallow cavity, width 5 in., which may have been intended to receive the flour. Mr Wynn Williams observes that he does not consider these "grain-crushers" to have been the most primitive appliances used in

[1] Catal. Mus. Roy. Irish Acad.; Stone Materials, p. 104, where an example of a similar kind of grain-rubber is figured; it is of sandstone, measuring 16¼ by 11 inches, and has a singular perforation at the side. There are other specimens in the museum at Dublin. I am indebted to Mr. Shirley for a notice of such "saddle-shaped" grain-crushers of larger dimensions, found in Ireland, measuring in length from 30 inches to about 3 feet.

[2] It is asserted as well established that wheat, and probably also oats and rye, were grown in Ireland long before the Christian era. See Dr. O'Donovan's Essay on the Antiquity of Corn in Ireland; Dublin Penny Journal, vol. i. p. 108.

[3] Arch. Camb., vol. vii. Third series, p. 40. See at p. 245, ibid., a letter relating to this "grain-crusher" by Professor Babington, who states that he had obtained, at Anglesey Abbey in the fens of Cambridgeshire, a similar pair of stones, now deposited in the museum of the Cambridge Antiquarian Society; they are very rude, and show no attempt at finish, although well fitted for the required purpose. He believed that Mr. Wynn Williams' specimen and that found in Cambridgeshire were the only examples of this type that had been noticed in Great Britain; but he refers to similar crushers in the museum of the Royal Irish Academy. In the exploration of subterranean chambers at Treveneague, in the parish of St. Hilary, Cornwall, as related by Mr. J. T. Blight, amongst pottery and various relics there was a piece of fine-grained granite, measuring 13¼ in. by 5¼ in., rubbed down on one of its faces evidently by a muller. It is of the same class of grain-crushers as those found at Ty Mawr and Tre-ifan, in Anglesey. A rounded stone of the same material, diam. 4¼ in., with a small depression on each side, was also found. Similar relics have occurred in Cornwall, and they are supposed to have been used in crushing grain. Trans. Penzance Nat. Hist. and Antiq. Soc., 1867, where both the relics above noticed are figured.

preparing cereal food ; he is disposed to consider the simple mortars, that are of more rude workmanship, as having been the first means used for pounding grain. Of these he possesses many specimens, found in the parish of Menaifron and other parts of Anglesey ; they measure from 12 to 2 in. in diameter.[4]

These relics of the occupants of Mona at a remote period are highly curious. It is almost unnecessary to remind our readers that similar crushing-stones have been used, and are still employed amongst uncivilized tribes in various parts of the world.[5]

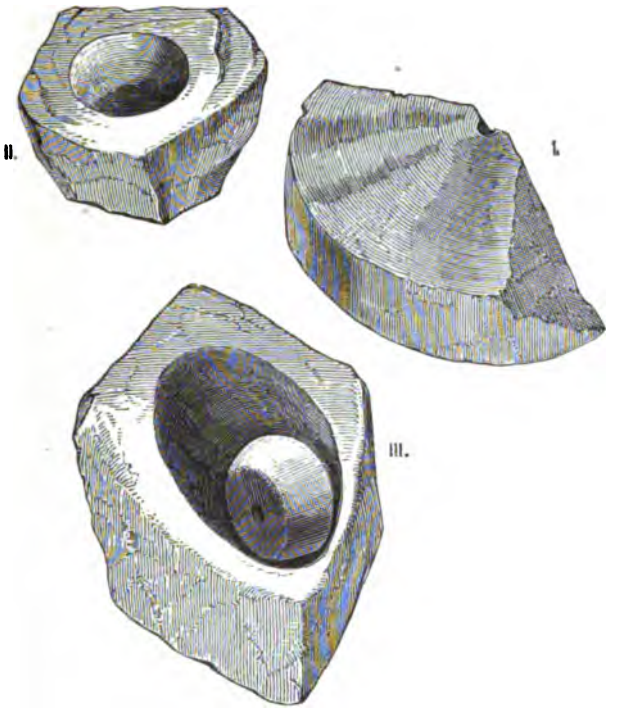
In the course of Mr. Stanley's researches in 1862, several stone querns and mortars were obtained in the neighbourhood that appear to deserve notice, although we cannot claim for them so high an antiquity as may be ascribed to the cyttiau. Three of these objects are here figured. I. A portion of the lower stone, of mill-stone grit ; diameter, in its perfect state, about 16 in. ; the top of the stone is convex ; the hole is seen for insertion of a spindle upon which the upper stone, or "runner," revolved.[6] This last existed within recent memory, but was lost.—From Glan rafon. II. A small

[4] Letter from Rev. W. Williams, Arch. Camb. vol. viii., third series, p. 157.

[5] A "saddle-quern," resembling that found at Ty Mawr, was sent to the museum of the Institute at the Hull meeting, 1867. It was found in the East Riding. Grinding-stones of precisely similar fashion occur on the sites of Pfahlbauten, in the Swiss Lakes. Compare also examples amongst German antiquities ; Wagener, Handbuch, fig. 117 ; Klemm, taf. 1. An object of the like description was in the Egyptian collection at the recent Universal Exhibition at Paris; this is the grinding-stone and muller used by the Soudan negroes; they are now at the British Museum, the entire collection having been presented by the Viceroy. In the Christy Museum may be seen another from Natal. Niebuhr describes a similar appliance for grinding millet used by the sailors in the vessel that conveyed him from Sidda ; Descr. de l'Arab. p. 45. Sir S. Baker thus quaintly notices the apparatus. "I must have swallowed a good-sized millstone since I have been in Africa, in the shape of grit rubbed from the moortraka, or grinding-stone. The moortraka, when new, is a large flat stone weighing about 40 lbs. Upon this the corn is ground by being rubbed with a cylindrical stone with both hands. After a few months' use half of the grinding-stone disappears, the grit being mixed with the flour ; thus the grinding-stone is actually eaten. No wonder that hearts become stony in this country." The Albert Nyanza, vol. i. p. 65. The Rev. A. Hume, LL.D., Hon. Sec. Hist. Soc. of Lancashire and Cheshire, informs me that, in a recent journey to South America, he found the triturating stones in full use not only among the Indians, but among the inhabitants of Spanish origin. It was in full work for bruising maize, whether raw or boiled, at Santiago. In the latter case a paste is formed, which is worked into thin cakes like the Scotch oatcake. Dr. Hume brought home a grinding slab and its rubber from Lota, 283 miles south of Valparaiso. Examples may be seen in the Blackmore Museum at Salisbury, where is also a saddle-quern from the pit-dwellings near that city.

[6] See notices of various types of querns by Sir W. R. Wilde, Catal. Mus. R. I. A., pp. 105—113, where several Irish examples are figured ; also Remarks on Querns, by the Rev. A. Hume, LL.D., Arch. Camb., N. S., vol. iv. p. 89 ; Memoirs Hist. Soc. of Lancashire, vol. i., 1848.

pentagonal mortar, of whin-stone, obtained at Ty Mawr, but probably of times comparatively recent; the basin measures about 3 in. in diameter. I saw two others, likewise of whin,



Fragment of a quern, and two mortars, found in Holyhead Island.

at Penrhos; the cavity in one of these is irregularly oval, measuring 9 in. by 7 in. III. A four-sided mortar, dimensions about 10 in. in each direction, with a small cylindrical grinder, measuring $4\frac{1}{2}$ in. in diameter; the basin is of oval form, measuring about 7 in. longest diameter.—From Pen y Bonc, where the cist enclosing urns and a jet necklace, described hereafter in this memoir, was brought to light. Stone mortars are not uncommonly found near ancient habitations in Anglesey; several were obtained with querns and other relics by the Rev. W. Wynn Williams at Llangeinwen.[7]

[7] Arch. Camb., third series, vol. ix. p. 280. See ibid., vol. iii. p. 356, a notice of a grinding slab of granite, having a cavity on its upper face apparently for bruising grain by a globular stone. It was found with mullers and other relics in Cornwall.

They may probably have been used for pounding grain or the like into pulp.

It has been stated that, in the same division of the hut, near the spot where the relic figured above was found, there was apparently a fire-place, E in the ground-plan; it measured about 18 in. by 2 ft.; it may deserve notice that its almost central position in the dwelling would doubtless facilitate the escape of smoke, if, as I am inclined to believe, the roof was of conical form with an opening, probably, at its summit. Two other small fire-places, however, may have existed, as indicated by some marks of fire and traces of jambs noticed against the main circular wall of the building—see H and K in Mr. Elliott's ground-plan. Within and near the little fire-place first mentioned there lay a considerable number of sea-shore pebbles, that had evidently been long subjected to the action of fire, and on careful examination we could not hesitate to conclude that they had been employed in certain culinary operations. I am not aware that in the recent investigation of primitive dwellings, especially in Cornwall and Somerset, in Caithness and other parts of North Britain, any distinct evidence of the practice of "stone-boiling" has hitherto been recorded. Mr. Tylor, indeed, has remarked in his interesting notices of that practice in North America, Kamchatka, New Zealand, and other Polynesian islands, that "the quantities of stones, evidently calcined, found buried in our own country, sometimes in the sites of ancient dwellings, give great probability to the inference which has been drawn from them that they were used in cooking. It is true that their use may have been for baking in underground ovens, a practice found among races who are stone-boilers, and others who are not."[8] By such a rude expedient it is certain that, when pottery or other vessels which would bear exposure to fire were unknown, water might be heated in skins,[9] in vessels of wood or the like, and even in baskets that would hold fluids, by means of stones made red hot in a fire close by, and gradually dropped into the seething liquid. The natives of the Hebrides, moreover,

[8] See Mr. Tylor's sketch of the history of stone-boiling, Early History of Mankind, p. 261—268; also the curious tradition related in p. 302. See also Sir John Lubbock's Prehistoric Times, pp. 250, 380.

[9] Capt. Risk, with whom I had the opportunity of conversing at Penrhos, soon after the investigation of the hut-circles at Ty Mawr, informed us that he had witnessed the process of cooking meat in skins, or "paunch-kettles," in the Brazils, at Buenos Ayres, and Rio della Plata.

as we are told by Buchanan, whose history was written about 1580, were accustomed to boil their meat in the paunch or hide of the animal. Many of the stones found in the caves in the Dordogne explored by the late Mr. Christy and M. Lartet, appear, as Sir John Lubbock remarks, to have been used in this manner as "heaters."[1]

In Ireland, as I am informed by the Rev. James Graves, such pebbles constantly occur in the remarkable subterraneous structures known as Raths, the character of which has lately been so well set before us by Col. Lane Fox.[2] When they bear no signs of burning, Mr. Graves has been accustomed to regard such round stones as missiles, for use by sling or by hand; the Irish, to this day, as he observes, throw a stone with extraordinary force and truth of aim. But when such stones bear traces of fire, Mr. Graves considers that they had undoubtedly been used in cooking.[3] It is remarkable that even in our own days "stone-boiling" is not wholly obsolete. In Carinthia, as the late erudite Swiss antiquary, Morlot, told me, they make a dark brown beer, called Steinbier, by throwing hot stones into the vat or cask; a fact that recalls the account given by Linnæus of Finnish beer called "Lura," prepared by throwing red-hot stones into the liquor instead of boiling it.[4]

In an adjacent part of the hut-circle, F, not far from the fireplace, was found, at 1, a stone whorl (fig. 2). This little object, which at first sight suggested the conjecture that we had found, in that western part of the dwelling, the *gynæcium* or resort of the mistress of the cyttiau, is of a class of relics occurring constantly on all ancient sites: it is of dark red sandstone, and measures about 1½ in. in diameter, ⅝ in. in thickness. These massive little discs or rudely-shaped beads

[1] The Rev. W. Wynn Williams, in his account of the remarkable walled enclosure and circular buildings at Penrhos Lligwy, on the north-east coast of Anglesey, mentions the occurrence of numerous sea-shore pebbles. These may, however, have been missiles for defence. No appearance of their being calcined is noticed. In kitchen-middings near the shore of Nova Scotia, were noticed, throughout the refuse deposit, with pottery, flint weapons, &c., many sea-beach pebbles, bearing evident marks of the action of fire. Anthrop. Rev., vol. ii. p. 225.

[2] See pp. 123, 136, *ante*.

[3] In connection with this very curious subject may be here mentioned the "Giants' Cinders" in Ireland,—heaps of half-calcined grit stones, called sometimes "the cooking places of the Fenians." They mostly occur, according to Mr. Graves, near water, and in some instances consist of a hundred cartloads, or more, of stones; some are of small extent. He informs me that, as he believes, these were places where the spoils of the chase were cooked, the hot stones being heaped round the carcases and forming rude ovens. See Trans. of the Kilkenny Arch. Soc., vol. iii. pp. 59, 84; Gent. Mag., June, 1854, p. 627.

[4] Tour in Lapland, vol. ii. p. 231.

are commonly designated distaff-whorls, and many examples seem well suited to be affixed as weights to the spindle: there is a considerable collection of such articles in the Museum at Dublin; they have been called by popular tradition in Ireland, "fairy mill-stones," and sometimes, by the older antiquarians, "amulets."[5] They have occurred frequently on the sites of Crannoges, as likewise around the Pfahlbauten of the Swiss Lakes. Some of these discs may be relics of female industry, but I incline to believe, with Mr. Franks, that not a few were fastenings of the dress. He remarks, in noticing a specimen found at Haverfordwest, and given in 1851 to the British Museum by Mr. Stokes:—"This is one of those curious objects frequently found in England, but regarding which various opinions have been expressed. By some it has been conjectured to be the *verticillus* of a spindle, from its similarity to such objects found with Roman remains; by others a bead or button. This last opinion seems not unlikely, as very similar objects have been found in Mexico which have certainly been used as buttons." The specimen from South Wales has evidently, as Mr. Franks notices, had a cord passed through it, the edge of the central hole being much worn by friction.[6] The reader who may care to investigate more fully such relics of female industry, will find abundant information in Dr. Hume's treatise on spindle-whorls, beads and pendants, in his Account of Antiquities found on the Sea-coast of Cheshire.[7]

Fig. 2 Whorl of red sandstone. Two-thirds orig. size.

I might mention other examples of the stone whorl found in North Wales; they present, however, no remarkable variation in their size or fashion. One similar to that above

[5] There are 70 specimens in the collection of the R. I. Academy. Wilde's Catal., p. 116. The industry of spinning and weaving flax was prevalent amongst the old occupants of the piled dwellings in Switzerland. See Mr. Lee's translation of the Memoirs by Dr. Keller on the Lake Dwellings; London, 1866: Longmans. The form of whorl is somewhat peculiar—one side is mostly flat, the other conical. They are usually of clay.

[6] Arch. Journ., vol. ix. p. 11. See also Professor Nilsson's observations on ancient Scandinavian buttons of amber and stone. Primitive Inhabitants of Scandinavia, translated by Sir John Lubbock, pp. 85, 86.

[7] Ancient Meols, by the Rev. A. Hume, LL.D.; London, 1863, p. 151; where numerous specimens are figured. Notice of several found in Anglesey may be found in the Arch. Camb., vol. vi., third series, p 376.

figured is in Mr. Stanley's possession at Penrhos. It was found in Anglesey, in the parish of Llanynghenedl, and not far from Ynys Llyrad, where, as before mentioned, a cluster of cyttiau may still be seen.

A few other relics of stone were brought to light within or in immediate proximity to the hut-circle at Ty Mawr. They consist of an irregularly rounded pebble, that may have been used as a sharpening stone or a polisher; and an oblong four-sided rolled pebble, length about $3\frac{1}{2}$ in., in its general appearance like a rudely-shaped celt, the smaller end being rubbed down, as if for some mechanical use: Mr. Franks informs me that similar pebbles occurred in kjökken-möddings in the Isle of Herm, one of the Channel Islands. Also a rolled pebble of quartzite approaching to greenstone (fig. 3). It may have been a hand-hammer, or used for

Fig. 3. Ovoid pebble from the Cyttiau'r Gwyddelod, Ty Mawr. One-third orig. size

pounding; each extremity shows effects of much percussion; there are also fractures where flakes appear to have been struck off, such as may have been used for rough arrow-points or the like. It is here figured on a reduced scale. The dimensions are about $3\frac{3}{4}$ in. by $2\frac{3}{4}$, greatest width. I may here likewise notice a ponderous cylindrical muller or grinding-stone of trap (fig. 4), found in an adjacent field in 1866. It measures $8\frac{1}{2}$ in. in length, the girth at the thickest part is $10\frac{1}{4}$ in.; the weight 6 lbs. 2 oz. One end was broken by the finder; the other bears indications of considerable percussion; one side also is somewhat flattened, possibly in triturating grain or other substances. See woodcut, one-third original size. No stone-

muller of precisely similar description has come under my notice, and I failed to find any in the Christy collection, so rich in the various types of antiquities of stone. The late

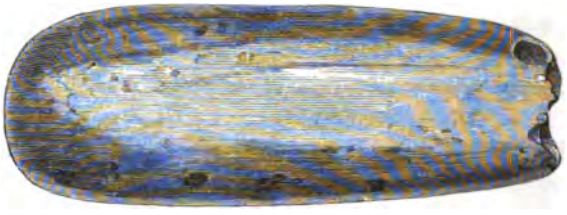


Fig 4. Cylindrical grinding-stone found near Ty Mawr. One-third orig. size.

Mr. Bateman, in his excavations in Derbyshire, found, on the site of a so-called British habitation, a cylindrical object of stone that he supposed to have been used for bruising grain, and he observes that it resembles one found in an Aztec burial-mound in South America examined by Capt. Nepean.[8] Mr. Anderson, in his report on cairns and remains in Caithness explored in 1865, describes an "oblong shore-pebble wasted at the ends by use as a pestle."[9]

I may here notice an implement, probably used likewise in the preparation of food, that was found, as Mr. Stanley informs me, a few years since in Holyhead Island, at no great distance from the vestiges of ancient habitations that he has brought under our notice. This object, now unfortunately lost, was a club-shaped stone pestle (fig. 5),

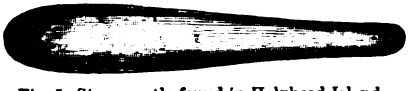


Fig. 5. Stone pestle found in Holyhead Island.

measuring in length about 11 in., and apparently suited for crushing grain or the like, by a process somewhat different to that for which the rubbers or cylindrical stones that have been described were suited. A few other examples of this comparatively rare type of implement are known to me. In the Edinburgh Museum there is a cylindrical-shaped

[8] Capt. Nepean's researches are noticed in the Archæologia, vol. xxx. Many of the relics discovered were presented to the British Museum.

[9] Other similar objects are likewise mentioned, found in a "Picts' House," Wick. Memoirs, Anthropol. Soc. vol. ii. pp. 228, 231. It is said that these implements resemble some obtained in shell-mounds, at Keiss Bay, in Caithness.

implement of porphyritic stone; the ends are rounded off to blunt points; it measures 11 in. in length, and 2½ in. in diameter; it was found with celts of serpentine, in a cairn at Daviot, Inverness-shire, where, according to tradition, one of Fingal's battles occurred.[1] This seems to have been one of the stone pestles under consideration, that may have served for grinding grain, or possibly as a club in close conflict. There is also one in the Museum of the Chichester Philosophical Society, found in digging gravel on Nutbourne Common in the parish of Pulborough, Sussex, near barrows and sites of primitive habitations. It lay in the mould about 18 in. deep, above and distinct from the gravel. Length 11½ in., diam. 2 in.[2] Another, of greenstone, found near Carlisle, length 16 in., was in possession of the late Mr. C. Hodgson, of that place. A specimen of this comparatively uncommon implement is also in the Museum formed at Audley End by the late Lord Braybrooke.

It has been stated by Mr. Stanley, that a considerable deposit, chiefly consisting of weapons and implements of bronze, was brought to light in 1832, under some large stones near the cyttiau at Ty Mawr. The discovery was brought under the notice of the Society of Antiquaries by the late Lord Stanley of Alderley.[3] The spot is marked in the Ordnance Map. A portion of the south-west flank of Holyhead Mountain, which had been left in waste, was brought under the plough; in removing one of the hut-circles, the relics here figured were exposed to view. It has been suggested that they appear for the most part to bear resemblance to relics of similar description found in Ireland; and this circumstance has been regarded with interest, in connection with the name and the traditions that would ascribe this fortified village of ancient dwellings to Irish occupants. Whilst recognising certain peculiarities that would lead us to regard some of these relics as of Irish types, it must be admitted that they may have been part of the spoils of Hibernian rovers, by whom doubtless the coasts of Anglesey and North Wales were constantly infested; the evidence of such a casual deposit will scarcely justify any inference that might bear on the supposed Irish

[1] Proc. Soc. Ant. Scot., vol. vi. p. 179.
[2] Catal. Museum formed at the meeting of the Institute, Chichester, 1853, p. 63.
[3] Archæologia, vol. xxvi. p. 483. In the Ordnance Map, 1830 is given as the date of the discovery.

origin of the cyttiau on Holyhead Mountain, or on the probability of any permanent Irish occupation of the strong position at Ty Mawr. It may seem more reasonable to suppose that the group of dwellings explored by Mr. Stanley may have been in its original intention an outpost to the great British fortress of Caer Gybi, that crowns the summit of the mountain, and have presented an important defence of the approach on that side, as also in a certain degree of the landing-place and small roadstead below. Here many a deadly conflict must have occurred between the occupants of the island and the rapacious rover, whether Irish, Dane, or Norwegian.[4]

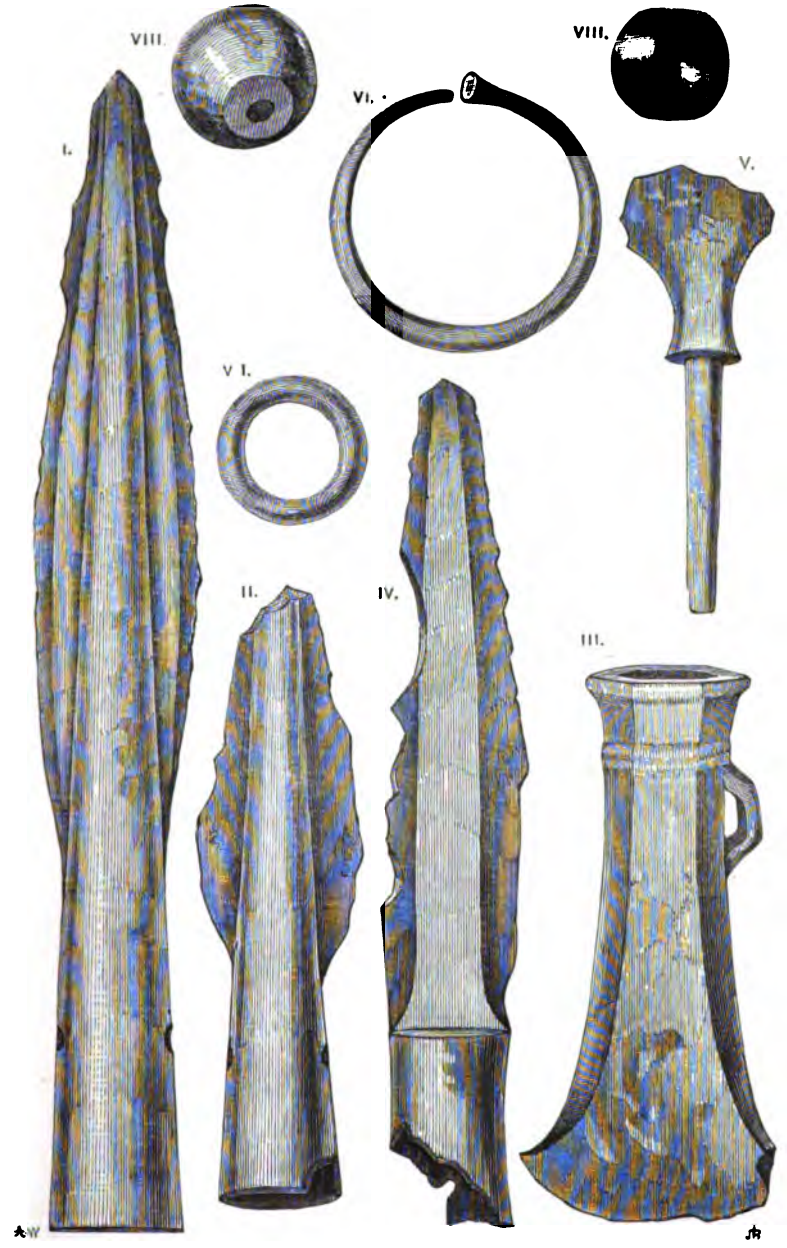
The relics, shown in the accompanying woodcuts, are as follows :—

I. A bronze spear-head, of the leaf-shaped type, beautifully formed, but somewhat decayed, as are also the other bronze objects, by oxidation. Its length is nearly 9 inches, the socket is perforated for a rivet; the blade has feather-edges perfectly worked and symmetrical; the rounded central rib or prolongation of the socket is hollow almost to the point, as shown by a narrow aperture caused by decay of the metal. This weapon closely resembles that in the Museum of the Royal Irish Academy, figured in Sir W. R. Wilde's Catalogue; spears of the same type, however —rarely so skilfully fabricated—have repeatedly occurred in England.[5]

II. A plain, leaf-shaped spear-head, of simpler fashion, the point broken. In its present state, its length is nearly 5 inches; the socket is perforated for a rivet. It may deserve notice, that in deposits where several bronze weapons have occurred together, two or three spears of various sizes have been noticed, as if forming together the customary equipment. On the moiety of a stone mould for casting weapons of bronze, found between Bodwrdin and Tre Ddafydd, in Anglesey, two of the dimidiated matrices were

[4] A short distance to the east of Ty Mawr, on or near the boundary of the ancient village of circular huts, a large stone may deserve notice, being known as "Mein Bras"—Stone of the Copper,—possibly on account of some deposit of bronze or other relics there brought to light at some former period.

[5] Wilde, Catal. Mus. R. I. A., p. 496, No. 6. Compare an example, somewhat differing in proportions, the socket being very short. It was found in the Thames. Horæ Ferales, pl. vi., fig. 29; also a spear-head found at Nettleham, near Lincoln, figured in this Journal, vol. xviii. p. 160.



Antiquities of bronze, with beads of amber, found in 1832 at Ty Mawr on Holyhead Mountain. Scale, two-thirds orig. size.

for casting spear-heads, dissimilar however in fashion to those found at Ty Mawr, and, in each instance, furnished with two side-loops.[6]

III. A looped and socketed celt, of Irish type, and of unusually good workmanship. Length 4¼ inches. A specimen in the Dublin Museum, resembling this celt in its general fashion, is one of those selected by Sir W. R. Wilde, out of a series of 201 socketed celts, as types of the most remarkable varieties of form that the socketed celt assumes. He has described the example in question as "a slender socketed celt, 4½ inches in length, of an irregular hexagon form in the middle, and circular in the slightly everted and decorated socket."[7] In the example found at Ty Mawr, the termination has a more strongly defined "hatchet face;" the hexagonal form is continued to the mouth; the opening is of irregularly square form. Several other slightly varied specimens have occurred in the sister kingdom.

IV. A small socketed dagger-blade, feather-edged, length somewhat more than 6½ inches, in its present slightly imperfect state. The blade is leaf-shaped, the socket oval, and pierced for a rivet that passed from front to rear, as most frequently found in objects of this description. In some specimens it passed from side to side. This type is distinctly, if not exclusively, Irish, and Sir W. R. Wilde enumerates 33 specimens in the Dublin Museum. He supposes that the pommel was of wood, bone, or horn; the length of the metal portion varying from 3¾ to 11½ inches. The socket is occasionally circular or quadrangular, and ornamented.[8] Mr. Franks gives, in the Horæ Ferales, a specimen with a short oval socket and two sets of rivet-holes; it was found at Thorndon, Suffolk, with a bronze gouge and

[6] This mould is figured, Arch. Journ., vol. iii. p. 257. A similar object found in the Co. Limerick, and presented by Mr. de Salis to the British Museum, is figured ibid., vol. xxii. Another stone mould for spears had been found in Co. Galway. Archæologia, vol. xv. p. 394.

[7] Wilde, Catal. Mus. R. I. A., p. 384, No. 406. Compare the celt found at Roscrea, Co. Tipperary, now in the British Museum. Horæ Ferales, pl. v. fig. 11. Mr. Franks describes it as having the sides divided into three facets, the socket oval. A stone mould for socketed celts of similar form, but curiously ornamented, found in Ross-shire, is figured in Dr. Wilson's Prehistoric Annals of Scotland, vol. i. p. 346, second edit., and a casting from the mould, ibid., p. 384.

[8] Wilde, Catal. Mus. R. I. A., pp. 465, 483. Amongst examples figured, one, No. 218, found in the Shannon, is similar to that found at Ty Mawr. Horæ Ferales, pl. x. p. 165. Two Irish specimens are in the Blackmore Museum, Salisbury; also one from Burwell Fen, Cambridgeshire, length 8 in. See also a similar weapon found with others in Argyleshire, Wilson's Prehist. Annals, vol. i. p. 390.

other relics. This specimen, and also two obtained from Ireland, are in the British Museum. In recent excavations of pit-dwellings at Highdown Camp, Sussex, Colonel Lane Fox found, at a depth of 3 feet, a dagger of the same type, 8½ inches in length, the point upwards; the socket is pierced for two rivets. These cavities are cut in the chalk, within the rampart, steps being cut around to descend into the pit.

V. An implement, unfortunately in imperfect state, length, in its present state, 3¼ inches; this is doubtless one of the four varieties of the chisel, described by Sir W. R. Wilde, as having a broad axe-shaped blade, a long slender spike or tang, and raised collar, against which the straight wooden handle abutted. There are thirteen specimens of this type in the Dublin Museum, ranging from 2½ to 6¼ inches in length.[9] A specimen from Burwell Fen, Cambridgeshire, is in the Blackmore Museum, Salisbury.

VI. A slight, plain penannular armlet, diameter 2 inches, the inner side flat, the outer face of the hoop rounded; one extremity obtusely pointed, the other is slightly dilated, a feature often seen in the gold Irish armlets. These personal ornaments occur in great variety in Ireland; they have been sometimes classed amongst objects regarded as a kind of currency, or "ring-money," but no reference to any such mode of barter, as Sir W. R. Wilde remarks, has been found in ancient records. Some of these rings, it is believed, were worn as bangles on the ancles. Usually each end is dilated, and sometimes slightly cupped.[1]

VII. Several stout rings, diameter about 1 inch, probably cast in moulds; relics of this class occur abundantly in Ireland, frequently double, and varying greatly in dimensions.[2] It may be remembered, that bronze rings occurred in the deposit of relics, mostly of Irish character, found at Llangwyllog, Anglesey, as described in this Journal, and also in the Archæologia Cambrensis.[3]

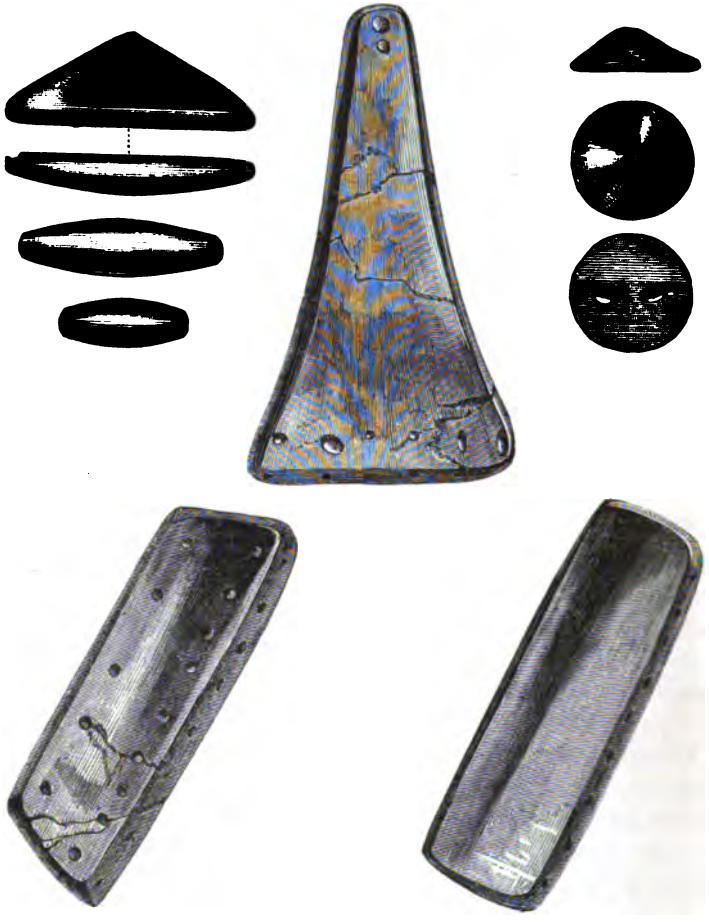
VIII. Amber beads, of various sizes, and more than commonly symmetrical in form; diameter of the largest beads somewhat more than an inch. A necklace of amber beads,

[9] Ibid., p. 521, No. 75; length 6¼ inches.

[1] Wilde, Catal. Mus. R. I. A., p. 570.

[2] Ibid., p. 577, and following pages. There are not less than 578 bronze rings of various fashion in the museum of the R. I. Academy, exclusive of finger rings and the like.

[3] Arch. Journ., vol. xxii. p. 74; Arch. Camb. vol. xii., third series, p. 97, where notices of amber beads discovered in the British Islands may also be found.



Reverse. Obverse.

Portions of a necklace of jet found, in 1828, in a sepulchral cist at Pen y Bonc, in Holyhead Island.

(Original size.)

of large dimensions, was found with the antiquities at Llangwyllog, formerly mentioned.

I proceed to notice a relic of considerable interest found in 1828 at Pen y Bonc (head of the bank), about a quarter of a mile south of the cyttiau at Ty Mawr. It is a necklace formed of jet, or possibly cannel coal, of excellent quality, and highly polished; it was found, as stated, in a kind of rock-grave—a sepulchral cist, rudely hewn out. Two urns were likewise found in the cavity, but on exposure they fell, as was reported, into fragments, that were not preserved. Unfortunately, a number of the beads, and other portions of which this ornament had been composed, were missing; they had probably been dispersed when the discovery occurred, a mischance that too frequently happens, such a find being casually brought to light without any supervision. When I made the sketches from which the woodcuts have been prepared by Mr. Blight, I found two end-portions, of which the reverse of one is figured, four oblong four-sided pieces, of which the obverse is shown in one case, and the reverse, in the other, so as to indicate the arrangement by which the intervening rows of beads were adjusted, strung on threads that passed through perforations

Probable arrangement of the jet necklace found at Pen y Bonc, Holyhead Island.

contrived with considerable ingenuity. There were also many beads, of various sizes; a triangular object, the intention of which has not been ascertained, and a flat conical button perforated on its under side; these last may have

formed parts of the fastening. Of all these, however, the woodcuts, of the full size of the originals, will supply an accurate notion; they are accompanied by a representation of a necklace, such as—after careful comparison of other examples—I believe that the ornament in its perfect state may have been. This valuable relic was exhibited at a meeting of the Society of Antiquaries, in March, 1844, by the late Lord Stanley of Alderley.[4]

According to the account of this discovery, as given by Hugh Hughes, tenant of the adjacent farm, the rock-grave, in the corner of which the jet necklace lay, measured about 3 feet in each direction; it was covered by a slab of stone. Besides the "crockery," he stated that armlets of bronze were found in the cist; according to another report, there was also a "penny piece," probably a coin. He remembers, moreover, to have seen three or four foundations of houses near the site of this deposit, of rectangular form, long uninhabited; they were formed of large stones, and known as "Ty Adda" and "Ty Eva," Adam's and Eve's Houses, indicating a tradition of the unknown antiquity of these dwellings.

The jet (*gagates*) of Britain was highly esteemed by the Romans, and many highly beautiful ornaments exist found in this country with Roman remains. It had been, however, employed at a much earlier period, as we may infer from numerous relics found throughout the British islands, and it is very possible that certain physical or phylacteric properties had been attributed in times long antecedent to the period when Pliny, Solinus, and other writers, described its inflammable quality, its power of attracting small objects, when rubbed, like amber, and various recondite medicinal virtues, to which it were needless here to advert.[5] The most

[4] Proceedings Soc. Ant., vol. i. p. 34.

[5] Pliny, Nat. Hist. lib. xxxvi. c. 19: Solinus, Polyhistor. c. 22. These statements, more or less modified, seem to have originated those given by subsequent writers, down to the often-cited observations of Bede: Hist. lib. i. c. 1. The estimation is which *gagates* was held by the Romans is a circumstance of great interest in connection with the extensive Roman manufactories of armlets and various objects of shale, at Kimmeridge and Worthbarrow, Dorset, the refuse waste pieces of which were so long a mystery to antiquarians under the description of "coal money." A certain resemblance to jet probably led to these extensive workings in shale in times of Roman occupation of Britain. The problem of "coal-money" was solved by Mr. Sydenham at the Archæological Congress in Canterbury, in 1845. Arch. Journal, vol. i. p. 347. See also the memoir by the Rev. J. Austen in the Transactions of the Purbeck Society.

ancient ornaments of jet or of amber that have been brought to light in Great Britain obviously appertain to a period of comparatively advancing civilization and skill in mechanical arts. They sometimes accompany relics of a race conversant with the use of metals, and practised in their manipulation. In the course of the late Mr. Bateman's explorations of barrows in Derbyshire, several necklaces were disinterred closely resembling that found on Holyhead Mountain. In a barrow near Buxton, called Cowe Lowe, several interments without cremation occurred, two of the skeletons being, as supposed, of females; two sets of beads, described as "of Kimmeridge coal," were here brought to light, with intermediate ornaments resembling those above described and bearing slightly-marked diamond patterns; there was also a round-ended implement of flint, a kind of scraper, but no object of metal was found. The two necklaces, consisting of not less than 117 pieces, are figured in Mr. Bateman's works.[6] The contents of this remarkable barrow were of very mixed character. In another barrow near Hargate Wall, encircled by a ring of large slabs, a central cist was brought to light, enclosing unburnt human and animal remains, deposited apparently at various periods, with an armlet and a necklace "of Kimmeridge coal" combined with ivory, a remarkable use of such material, of very rare occurrence.[7] Of the former substance were oblong beads and conical studs, similar to those found at Pen y Bonc; with these were intermediate four-sided pieces, and two triangular terminal ornaments, all of them, as stated, of ivory, worked with chevrony patterns. Two other necklaces of more elaborate character are preserved in Mr. Bateman's museum at Youlgrave: one of these was found on Middleton Moor, in a barrow that contained a cist, in which lay unburnt remains of a young female and a child: this necklace is described by Mr. Bateman as "the most elaborate production of the pre-metallic period" that

[6] Bateman's Vestiges, p. 92. See also Mr. Roach Smith's Collectanea, vol. v. p. 147.

[7] Vestiges, p. 89. These beautiful relics are also figured Journ. Brit. Arch. Assoc., vol. ii. p. 284. Another necklace, formed of a material of inferior quality, designated "jet wood," is described and figured in that Journal, vol. vi. p. 4. It was found in a barrow near Egton, N. Riding of Yorkshire, by Mr. Tissiman, of Scarborough, and is composed chiefly of oblong beads and conical studs, graduating in size; the central portion is of jet of the best quality; it is four-sided, stippled in a lozengy pattern. This interment was accompanied by a ring of "jet-wood," a rudely-shaped object of flint described as a spear, and two flint arrow-heads.

he had seen : it is composed of not less than 420 pieces of jet and bone, cylindrical beads, perforated plates, conical studs, etc. In this instance one portion was obtained, in form an obtuse angled triangle, and resembling that found at Pen y Bonc. Mr. Bateman seems to have regarded it as the link by which a very elaborate pendant was attached to the necklace.[8]

The fourth example obtained by Mr. Bateman lay with three skeletons, a male and two females, deposited on the rock under a barrow at Grindlow, near Over Haddon. The interment was accompanied by rude implements of flint. The forms of the various objects of jet, 72 in number, vary slightly from those already noticed ; there is much stippled ornament on the intermediate plates, and one of these is of bone. Of the beads 39 are conical studs, pierced at the back by two perforations meeting at an angle in the centre.[9] The skill with which so fragile a material, whether shale or jet, was drilled in the construction of these necklaces is remarkable ; it is difficult to comprehend by what kind of implements, in an age possibly anterior to the use of metals, so difficult an operation could have been effected.

Several other examples of these necklaces of jet might doubtless be enumerated.[1] The relics of that material found in the primitive cists and cairns in North Britain, as we are informed by Dr. Wilson, are of frequent occurrence. The circumstances under which they occur, in many instances, lead us to conclude that they are productions of native ingenuity, at an early period, unaided, as some antiquaries have been disposed to believe, by any civilizing influence

[8] Ten Years' Diggings, p. 25, where the skeletons in the cist are figured. The skull found in this very remarkable interment has been selected for the "Crania Britannica," as the type of the British female. See pl. 35 (2).

[9] Ten Years' Diggings, p. 47. Crania Brit. 35 (3). In the minute description of this and the preceding example of these necklaces, Mr. Bateman mentions jet as the material. A very good example of the conical stud, similar to those above noticed, but of rather larger dimensions, may be seen in the museum of the Antiquaries of Scotland. It is figured in Dr. Wilson's Prehistoric Annals, vol. i. p. 442, second edition.

[1] A jet necklace of somewhat remarkable fashion was found a few years since on the estates of the late Marquis of Waterford, at Ford Castle, Northumberland. It had been deposited in an urn, and consisted of beads with four-sided plates described as resembling "miniature hatchets." In a cist on the moor near Old Bewick, in the same county, examined in 1865 by Mr. Langlands and Canon Greenwell, seventy beads of jet were brought to light. The depository was one of a group of cists in a cairn surrounded by upright stones. This "Druidical Circle" may have been the burial-place of a family. In another cist lay a very large urn, of the class usually found with unburnt remains. Gent. Mag., vol. xix., N. S., p. 716.

from intercourse with the Romans. On the other hand, certain specimens unquestionably present evidence of experienced skill and of ornamental fashion, that would associate them with objects of a comparatively late period.[2] In the Museum at Edinburgh a remarkable necklace of jet may be seen, that has been figured by Dr. Wilson. It closely resembles that found in Holyhead Island, but the chevrony, lozengy, and other ornaments, on the four-sided portions especially, are stippled with gold. This relic was found at Assynt, Ross-shire, within an urn enclosed in a rude stone cist, in which lay some bones, the evidence doubtless of an interment without cremation. The cist was brought to light in removing a mound of earth, the small dimensions of which, as suggested by Dr. Hibbert, by whom the discovery was made known to the Antiquaries of Scotland, may have indicated the grave of a female.[3] Sir Richard Hoare, however, states that he had very rarely found an urn with the remains of a female. Dr. Wilson has noticed other ornaments of a similar description found in North Britain. A necklace of jet and amber beads of different fashion, and probably of somewhat later date, was exhibited in the Museum formed at the meeting of the Institute at Edinburgh in 1856, amongst relics contributed from the Arbuthnot Museum, Peterhead; it was found, with a celt of black flint, 7 in. in length, at Cruden, on the coast of Aberdeenshire; the jet beads are of oblong form and range from 1 to 5 in. in length.[4] A precisely similar bead of jet of the same unusual dimensions exists in the Museum of the Royal Irish Academy, and is figured in the catalogue by Sir W. R. Wilde, by whom we are informed that jet as well as amber was extensively used in Ireland, not less than 60 specimens of studs, buttons, and

[2] Prehistoric Annals of Scotland, vol. i. p. 433, second edition.

[3] Archæologia Scotica, vol. iii. p. 49, pl. v., where the various objects of jet are figured. Dr. Hibbert assigned their interment to the Scandinavian Vikingr. The fine necklace found at Assynt is minutely described by Dr. Wilson, and well figured, Prehist. Annals, vol. i. p. 435. It was exhibited in the museum at the Edinburgh meeting of the Institute with another of like fashion found in a cist near Brechin. Museum Catal., p. 15.

[4] Figured, Catalogue of the museum at the Edinburgh meeting, p. 10. In the centre of a cairn at Rothie, Aberdeenshire, examined in 1864 by Mr. John Stuart, was found a cist enclosing bones, supposed to have been burnt, an urn, and a necklace of jet, composed of oblong beads, rectangular and triangular pieces; also two beads of amber and a small object of bronze. Proc. Soc. Ant. Scot., vol. vi. pp. 203, 217. In a recent communication, also, to the society by Capt. Courtney, R.E., mention is made of the discovery of a jet necklace in a cairn on the moor near Kintore, Aberdeenshire.

beads being preserved in that collection.[5] Large rings and armlets of the same material have likewise been found, especially on the sites of stockaded islands or Crannoges.

The occasional combination of portions of bone in the jet necklaces of the type so remarkably exemplified by the specimen found at Pen y Bonc is a circumstance of considerable interest. The contrast of colours was doubtless very effective; the use of such luxurious ornaments suggests the conclusion that they must have appertained to a race of no very barbarous conditions. Not only do we find, however, the mixture of bone, or of ivory, if we may so regard the material employed, in one memorable instance recorded by Sir Richard C. Hoare, in an early interment in a barrow at Kingston Deverill, Wilts, beads of jet and of horn with other relics were found with burned bones in a cist cut in the chalk; there were also more than forty beads of amber, and six oblong plates of the same material, perforated so as to be strung together lengthways, and, when thus combined, measuring together nearly 7 in. in length by $2\frac{1}{8}$ in. greatest width.[6] There can be little doubt that these amber tablets were not intended to be strung together, as figured by Sir Richard Hoare; the oblong and other beads found with them no doubt had originally been arranged in intervening spaces, in like fashion as in the necklaces of jet already described. It must be noticed that the interment at Kingston Deverill was accompanied by a small ornamented cup and a little brass pin; the conclusion was obvious that the cist enclosed the ashes of some distinguished female. Ornaments of jet, and more frequently of amber, were of frequent occurrence in the Wiltshire barrows; they were accompanied in many instances by objects of metal.[7]

[5] Catal. Mus. R. I. A., by Sir W. R. Wilde, Vegetable Materials, p. 241. Some very large beads of jet, from Mr. Chambers Walker's collection, found in co. Sligo, are now in the museum at Alnwick Castle.

[6] Ancient Wilts, vol. i. pl. iii. p. 45. In a small barrow near the same spot burned bones lay piled together in an oval cist, with beads of amber, jet, and glass, and a "pair of ivory tweezers," figured ibid., p. 46.

[7] See especially the large ring, Ancient Wilts, vol. i. p. 239, pl. xxxiv., found with barbed arrow-heads of flint, a dagger of gilt bronze, and other relics, around a skeleton at Woodyates; also the singular objects, ibid., p. 202, pl. xxv. The frequent mention of objects of "ivory," as found with British interments examined by Sir R. C. Hoare, and also by Mr. Bateman, claims careful consideration. The occurrence of oriental or of African ivory would imply intercourse with distant lands that it were not easy to comprehend. Morse ivory, or tusks of marine animals, might possibly be obtained on the shores of some parts of the British islands, or from Scandinavian countries. The expression "bone or ivory," in notices

The conical buttons or studs, of which specimens occurred at Pen y Bonc, are perhaps the objects of jet most frequently noticed. In a memoir by Mr. Bateman on his researches on the Moors of Derbyshire in 1845, he describes a barrow called Net-Lowe, in which lay a skeleton at full length; close to the elbow was a large brass dagger, and a pair of studs, that probably had been attached to the dagger-belt. Rude implements and chippings of flint lay around.[8] Here, as in other interments, relics of jet or shale occurred with objects of metal; they have likewise, as already noticed, frequently accompanied Roman relics in Britain, but in these instances their fashion has, I believe, invariably indicated their Roman origin.[9]

On reviewing all the facts that have been adduced, especially in regard to the female ornaments, of which Mr. Stanley has brought a remarkable example under our notice, I am inclined to agree in the opinion of Mr. Bateman, and to assign such necklaces, with some other relics of jet or shale, to a race that inhabited our island previously to the use of metals—at a period when interment in cists, without cremation, prevailed. This, however, is not in accordance with the opinion of another accomplished archæologist, Mr. Roach Smith, for whose discernment in such questions I have the highest respect: he considers the tumuli in which such necklaces have been found to be probably of early Romano-British origin.

In regard, however, to the discovery at Pen y Bonc and the remarkable ornament that I have described, there can, I apprehend, be no hesitation, although the site is not far distant from the Roman stronghold at Holyhead, in considering the deposit as distinct from any vestiges of Roman

of the relics in question, appears to show some uncertainty in regard to the material, which often it may be difficult to identify. The "ivory" armlet found with a female skeleton near Woodyates Inn, measuring 5 inches in diameter, cannot have been of any ordinary bone obtained in Britain. Ancient Wilts, vol. i. pl. xxxii. p. 235.

[8] Barrows opened in Derbyshire, in 1845, by Thomas Bateman, jun.; read at the Winchester meeting of the Archæological Association; Winchester volume, p. 209. A similar stud of smaller size is figured, Hoare's Ancient Wilts, vol. i. pl. xxxiv. See in Dr. Wilson's Prehistoric History of Scotland a remarkable example found in Lanarkshire, vol. i. p. 442.

[9] A *bulla* of jet found at Strood, Kent, is figured in Mr. Roach Smith's Collectanea, vol. i. pl. xi. p. 19, where mention of Roman relics of *gagates* may be found. In vol. v. p. 146, pl. xv., a sculpture at Lincoln is figured, representing a lady wearing a necklace of a type that occurs amongst Roman ornaments of jet found in England.

date. Objects of jet are comparatively rare in the Principality; a few relics of that material found at Llangwyllog, in Anglesey, have recently been noticed in this Journal; they have been presented by the Ven. Archdeacon of Bangor, in whose parish the discovery occurred, to the British Museum. The objects of stone found in Mr. Stanley's excavations at Ty Mawr have been there also deposited; it were doubtless much to be desired that the neck-ornaments above-noticed, and which are not in his possession, should likewise be preserved in the National Depository, where no relic of the same description is to be found.

ALBERT WAY.

ADDITIONAL NOTE ON SUPPOSED TRACES OF "STONE-BOILING" FOUND IN A HUT-CIRCLE ON HOLYHEAD MOUNTAIN.

WHILST the foregoing notices were in the press I have had occasion, through the kindness of Mr. Edward T. Stevens, to examine the relics found in pit-dwellings near Salisbury, in 1866, and preserved in the Blackmore Museum in that city. The highly instructive collection there displayed, chiefly in connection with the "Stone Age," and comprising a very important series of ethnological evidence bearing on that obscure period, has been brought together through the generosity of the founder, Mr. Blackmore, with the zealous co-operation of Mr. Stevens, by whose intelligent exertions in the arrangement of the collection archæological science has been essentially promoted. The singular domed pit-habitations at Fisherton, about a mile west of Salisbury, consisted of groups of circular chambers excavated in the drift gravel, and supposed to have been winter-dwellings of a people whose summer-station was explored by Dr. Blackmore at Petersfinger and Belmont in the same neighbourhood. The first indication of such troglodytic habitations was supplied by the occurrence of calcined flints in large quantities, of which specimens were shown to me by Mr. Stevens; his conclusions seem in accordance with my own, that these burned stones, mostly of a size to be conveniently grasped by the hand, may confidently be regarded as evidence of the practice of "stone-boiling." In corroboration of this supposition, it must be noticed that the pottery, of which abundant fragments were found, seems to have been ill suited to bear exposure to fire; and, as Mr. Stevens pointed out, the inner surface of many portions is coated by carbonaceous matter, suggesting the conclusion that it had been deposited by the charred stones thrown into the vessels, according to the primitive culinary process. No signs of fire or encrustation from smoke upon the roof of the chambers could be perceived; the cooking may, however, have been carried on outside the dwelling, according to a practice to which Mr. Stanley has adverted. It is hoped that detailed publication of these very curious discoveries by Dr. Blackmore and Mr. Stevens will not be long deferred. The calcined flints, locally termed 'milk-stones" in the eastern parts of Hampshire, and brought under our notice by Sir J. Clarke Jervoise, Bart., are probably traces of the practice in question. Arch. Journ. vol. xx. p. 371. The Rev. E. Kell, F.S.A., in a recent memoir on Roman remains near Andover, and the supposed site of *Vindunum*, observes that the neighbourhood teems with traces of earlier times. "The vestiges of the ancient British population are numerous; charred flints, known by the name of 'pot-boilers,' abound. Flint implements, consisting of celts, lance and arrow-heads, sling-stones, &c., have been found on many parts of the surface in this neighbourhood." Journ. Brit. Arch. Ass., 1867, p. 280. Similar vestiges are doubtless to be found on other sites of early occupation.

Original Documents.

LETTERS OF CONFRATERNITY GRANTED IN 1481 BY THE MASTER AND BRETHREN OF THE HOSPITAL OF BURTON LAZARS, LEICESTERSHIRE, TO JOHN DOD, MATILDA HIS WIFE, AND THEIR CHILDREN.

From the muniments of Whitehall Dod, Esq., at Llanerch Park, Flintshire. Communicated by WILLIAM BEAMONT, Esq.

In a former volume of this Journal[1] we availed ourselves of the kind permission of Mr. Whitehall Dod to bring before our readers an Indulgence granted by Robert Bolton, "Minister" of the House of Trinitarian Friars near Knaresborough, and found amongst the valuable family evidences at Llanerch Park by our obliging friend Dr. Kendrick of Warrington. Documents of this description, as it was then observed, are comparatively of rare occurrence, and they possess considerable interest, as illustrations of the history of certain conventual establishments, and of the special privileges that they enjoyed.

The subjoined Letters of Confraternity may probably have been granted by the Master and Brethren of the Hospital of Burton Lazars to the same persons, with the addition however in the present instance of their children, as the John Dod and Matilda his wife, in whose favor the Indulgence above-mentioned was granted ten years subsequently by the "Minister" of the House of St. Robert near Knaresborough. The chief privilege, it may be remembered, conceded by the latter, consisted in its authorising the appointment, by the persons for whose benefit it was intended, of a confessor, who might hear their confession, and grant them absolution of all sins, &c., with certain exceptions specially mentioned. The Indulgence granted by Papal authority to the members of the confraternity of Burton Lazars, as set forth in the following document, included the like privileges, and also participation in all masses and services in all churches throughout the world. The further privilege was enjoyed by the *confratres*, that vows of abstinence or of pilgrimage might be commuted for benefits piously rendered to the Hospital, with the exception only of the vows that concerned the Holy City, and St. Peter and St. Paul. In the hour of death full remission of all their sins was granted to them, and, in the event of their decease during a time of interdict, burial was not to be refused, unless indeed such *confratres* should be by name under the ban of excommunication.

The seal appended to the subjoined document is unfortunately in an imperfect state. We are indebted to the kindness of Dr. Kendrick for an impression of a seal in his collection that has been regarded as that of Burton Lazars. It is of pointed oval form, measuring about 2 in. by 1¼ in.; the device is an episcopal figure standing in a niche of tabernacle work, the right hand is raised in benediction, the left holds a crosier: legend, (*in extenso*)—Sigillum fraternitatis Sancti Lazari Ierusalem in Anglia. The execution is coarse and unartistic; date about the middle of the fifteenth century. No other seal of Burton Lazars is known to Dr. Kendrick, and he informs us that this is the only seal noticed by the late Mr. Pettigrew in his Memoir on Leper Hospitals. Journal Brit. Arch. Assoc., vol. xi. A common seal of the Hospital is figured, however, by Nichols; the device is a

[1] Arch. Journ., vol. xxiii., p. 144. See also some previous notices of Indulgences granted to members of certain confraternities, ibid., vol. xvii., p. 250.

demi-figure of St. Augustine, with two escutcheons, one being charged with the coat of Mowbray, the other with a cross; these arms seem to have been used by the Hospital, sometimes impaled, sometimes separately. Hist. Leic., vol. ii. p. 272–276. Sir William Sutton occurs in the list of Masters in 1456. Dugdale, Mon. Ang., vol vi. edit. Caley.

Universis sancte matris ecclesie filiis ad quos presentes litere pervenerint Frater Willielmus Sutton, Miles, et Magister de Burton Sancti Lazari Ierusalem in Anglia, et ejusdem loci Confratres, salutem ac utriusque hominis[2] continuum incrementum verum. Dilectioni vestre innotescimus per presentes quod Sancte Romane[3] pontifices ex plenitudine eorum potestatis nobis graciose indulserint quod omnibus qui de facultatibus et bonis eisdem a Deo collatis nobis subvenerint, aut in sanctam fraternitatem sint assumpti, ac omnibus benefactoribus et exhortatoribus tociens quociens unum annum injuncte penitencie relaxaverint, et in plenam participationem omnium missarum et aliarum devotionum singulis ecclesiis per universum orbem Deo offerendarum; ac singulis annis in die Veneris magne ebdomade eorum proprium curatum plenam habere potestatem eosdem absolvendi ab omnibus eorum peccatis, nisi forte talia commiserint propter que sedes apostolica sit merito consulenda; et etiam vota abstinencie et peregrinationis quecunque commutandi[4] in alia pia subsidia dicti[5] Hospitali erroganda, votis Ierosolimitanis et beatorum Petri et Pauli duntaxat exceptis; et in tempore mortis omnium peccatorum suorum plenam remissionem. Et si ecclesie ad quas pertinent a divinis officiis fuerint interdicte, ipsosque mori contingerit, eisdem sepultura non negetur, nisi vinculo excommunicationis nominatim fuerint innodati. Unde nos Magister et Confratres Hospitalis antedicti auctoritate apostolica vigoreque privilegiorum nostrorum in nostram confraternitatem recipientes dilectos nobis in Christo *Johannem Dod et Matildam uxorem cum omnibus pueris*[6] nostrorum privilegiorum ac hujusmodi indulgenciarum participes in omnibus facimus per presentes. In cujus rei testimonium sigillum nostrum presentibus est appensum.

Datum apud Burton predicto anno domini millesimo cccc. octogesimo primo. ij^{d}.[7]

The following absolution is endorsed on the document:—

Auctoritate Dei Patris omnipotentis et beatorum apostolorum Petri et Pauli et totius matris ecclesie, et virtute hujus bulle et papalis indulgencie, ego absolvo te ab omnibus peccatis tuis mihi confessis et contritis, et de quibus velles confiteri si tue occurrerent memorie; et concedo tibi plenam absolutionem et remissionem omnium peccatorum tuorum in quantum claves ecclesie se extendunt in hac parte, ut sis absolutus ante tribunal Domini nostri Jesu Christi, habeasque vitam eternam, et vivas in secula seculorum. Amen.

[2] This word, written ho'is, should doubtless thus be read *in extenso*. Compare Madox, Form. Ang., No. dxciv. p. 336, where the phrase "Salutem in utroque homine" occurs, probably signifying the outer and inner man,—body and soul, alluding to 2 Cor. iv. 16, Eph. iii. 16, &c.

[3] *Sic.* Possibly *sedis* being understood.

[4] This word seems to have been written —commtandi—but we presume for commutandi.

[5] *Sic.*

[6] The words printed in italics have been written by a second hand on a space left for the purpose in the blank form of the letters of confraternity, in like manner as was noticed formerly in an Indulgence granted by the Trinitarian Friars of Knaresborough. Arch. Journ., vol. xxiii., p. 147, note 6.

[7] This appears to be a note of the scribe's charge, or some other fee for delivery of these letters of confraternity.

Proceedings at Meetings of the Royal Archaeological Institute.

May 3, 1867.

Sir John P. Boileau, Bart., V.P., in the Chair.

Mr. Burtt, *Hon. Sec.*, reported that since the last meeting of members the Central Committee had carefully considered the subject of the effigies at Fontevrault, and the decision at which His Majesty the Emperor of the French had arrived to retain those monuments there. The Committee had thought such a decision by His Majesty exceedingly satisfactory, completely agreeing as it did with the feeling expressed so generally by the members of the Institute at their last meeting; and they thought the opportunity should not be lost of expressing to His Majesty their gratification at such a result of his deliberations upon the subject. They also thought it right to convey to His Majesty at the same time their sense of the great encouragement His Majesty had afforded to the prosecution of archæological science. An address had therefore been voted to His Majesty, and he (Mr. Burtt) being about to visit Paris, undertook to take charge of it for the purpose of its presentation. He had accordingly waited upon His Excellency the English Ambassador with letters of introduction; and, through His Excellency, His Majesty had intimated his wish that the address should be forwarded to him. Earl Cowley had thereupon kindly consented to receive the address, and promised to present it without delay to His Majesty.

The secretary then read the address, as follows:—

"To His Imperial Majesty, Napoleon III., Emperor of the French.

"Sire,—The undersigned, the Secretary of the Royal Archæological Institute of Great Britain and Ireland, is charged, by order of the President and Council of the said Institute, with the honour of conveying to your Imperial Majesty the respectful expression of the satisfaction with which they have received intelligence that your Majesty has been pleased to assume the honourable duty of the conservation of the monumental effigies of the Plantagenet Sovereigns of England at Fontevrault, and the restoration of the noble and ancient church of the Abbey wherein they repose.

"The Royal Archæological Institute, while deeply grateful for the courteous and friendly feelings which had prompted your Majesty to offer to England these relics, had yet—on first hearing of their intended removal, true to their duties as conservators of historical monuments on their ancient sites, and of the remains of the illustrious dead—expressed a hope that the monuments of those who, while kings of England, were also Counts of Anjou, should not be disturbed, but that your Imperial Majesty be re-

spectfully advised of their reported condition of neglect and disrepair, in the assurance that they would thus be more fitly cared for and preserved.

"The progress of this matter was watched with extreme solicitude by the Royal Archæological Institute, until the final decision of your Majesty was known, by which the wishes of the Institute had been anticipated; and the President and Council desire to express their full appreciation of the kindly spirit and graceful resolve of your Imperial Majesty.

"The Institute has, on many occasions, acknowledged with deep gratitude the interest taken by your Imperial Majesty in the objects of their association, especially in your investigations into the ancient history of Gaul; and gladly seizes this opportunity of expressing their thanks for the many acts of courtesy shown to British archæologists by your Imperial Majesty; on one occasion—eminently—when M. Maury was commissioned to attend the meeting of the Institute held at Rochester, in 1863.

"In tendering to your Imperial Majesty this expression of their sentiments, the President and Council fervently hope that, while the Royal Sepulchres remain on their original site, time may continue to confirm and increase more and more the intimate ties and warm sympathies subsisting between the great French and British peoples, which owe so much to the friendly policy constantly promoted by your Imperial Majesty.

"The undersigned has the honour to be, Sire, with profound respect, your Imperial Majesty's most obedient and most humble servant,

"(By order) W. R. Lodge, Secretary.

"Talbot de Malahide, President.

"By Joseph Burtt, Honorary Secretary."

The Chairman thought that the address which had been read had been well written, and very well expressed the sentiments of the Council; and he was much gratified with the steps that had been taken for its presentation to the Emperor of the French. In this opinion the members present seemed fully to concur.

The following particulars may prove acceptable to some of our readers, who may not be fully conversant with the history of these royal memorials. The interest associated with the memorials of the Plantagenets at Fontevrault was excited in this country as soon as renewed intercourse with France, after the Restoration, made us aware that these sepulchral portraitures of our sovereigns and their consorts still existed, although in a most neglected condition. During revolutionary terrors they had been thrown down from the stately and inappropriate monument on which they had been laid together in a row by one of the Abbesses, in the seventeenth century, as shown in an engraving given by Sandford in his history of the royal race. The original tombs had doubtless been removed at that period; it does not appear that their destruction should be ascribed to the republican fury that desecrated the sepulchres at St. Denis, and wantonly reduced to fragments the sepulchral memorials of the ancient French aristocracy. The Fontevrault statues became known also through the skilful delineations by Charles Stothard, and their value as early examples of monumental sculpture has been highly appreciated by antiquaries. In 1817 negotiations took place for their transfer to this country; but, on the remonstrance of the Prefect of the department, some local interest also in regard to these long neglected memorials being aroused, the ministers of Louis XVIII. declined to gratify the request of the Regent that they should be ceded to England. The effigies were, however, at that time removed from the spot where they lay,

as described, "au milieu des décombres, comme des débris sans valeur." They were placed in a part of the abbey church then appropriated for divine service, the noble old structure having been converted into a military penitentiary, floors being constructed across the nave and other portions of the fabric to provide wards for the *détenus*. On the formation of the Historical Collections at Versailles the effigies were removed to that place by order of Louis Philippe: they underwent "restorations" and embellishments, the damaged features being skilfully made good—noses, hands, and other defective portions supplied. Stothard's beautiful etchings are a faithful memorial of their previous condition. Overtures were again made by the English government to obtain their transfer, but strongly opposed in the Chambers by the Comte de Montalembert, supported also by the opinion of antiquaries and local institutions. On the revolution in 1848 it is alleged that the proposition was suggested to effect an arrangement, by transfer of the precious Gaignières Collection preserved at the Bodleian, in exchange for the statues. It is doubtful how far any such scheme of barter was seriously contemplated, and it is very improbable that it could ever have been entertained by the authorities of the University. Ultimately, the Plantagenets, after repeated solicitations on the part of the Archæological Society of Angers, were restored to Fontevrault. It deserves to be mentioned that, during their temporary migration, the effigies had been carefully drawn and engraved for the Annales Archéologiques, where a full account is given by M. de Guilhermy, tom. v. p. 280. In 1862 the French Society of Archæology, instituted for the conservation of historical monuments, held their congress at Saumur, not far distant from Fontevrault. On that occasion a formal visitation of the desecrated abbey church and remarkable remains of the conventual buildings took place, including the unique sepulchral chapel, with its lofty shaft like a chimney, and the very curious kitchen which may be compared with that of Glastonbury. A very interesting notice of the peculiar artistic features of the Plantagenet statues was brought before the Congress by M. de Galembert; the earnest desire for more suitable preservation of those valuable sculptures was conveyed in a remonstrance in unison with that of the local Antiquarian Society and many influential individuals. No result, however, appears to have been effected in favour of the effigies, until recent efforts for their better preservation aroused in Anjou, and also in other parts of France, a lively desire that the long-neglected memorials of the Royal Angevine counts should not quit the territory with which their undying interest is associated.

The following "Notes on Holm-Cultram Abbey, in Cumberland, and on remains lately brought to light there," were read, illustrated by photographs communicated by Robert Ferguson, Esq., of Morton, Carlisle.

The vestiges of the Cistercian Monastery of Holm-Cultram, in Cumberland, situated about seventeen miles west of Carliale, are singularly slight in extent, and present little, if any, attractions to the architectural antiquary. The abbey, however, of royal foundation, and enriched by subsequent royal endowments, was a house of much importance on the northern frontier; its abbots were frequently summoned to sit in Parliament during the reigns of the Edwards, in the thirteenth century; its possessions were extensive, its revenues at the surrender in 1534 amounted to more than 500*l.* per annum. The buildings of the monastery were, probably, demolished shortly after the Dissolution, a parochial chapel was formed out of the ruins; and part of the church, in its original form, may still be

seen. In 1600 the fabric had sustained much injury by the sudden fall of the lofty tower, which destroyed great part of the chancel, and four years after this calamity the church was almost wholly consumed through an accidental fire. The body of the church was repaired by the parishioners, and the chancel rebuilt at the cost of the incumbent, who had been accused, as it should seem however, unjustly, of having wilfully burned the structure. Three views of the church, apparently in its roofless condition, may be seen in Stevens' Additions to Dugdale's Monasticon.[1] They represent the north side, with a long range of round-headed clerestory windows, the east end, as exposed after the destruction of the chancel, of which the foundation walls still sufficed to indicate the proportions, and the west end, with a projecting porch and round-headed doorway bearing the inscription—Robertus Chamber fecit fieri hoc opus A°. Dñi M°.D°.vij. Considerable changes appear in the view of the same part of the fabric, as shown in Coney's etching given in the new edition of the Monasticon.[2] In Buck's Series of Views of Ancient Structures, published in 1739, a south-east view of the conventual church may also be found, showing some of the arches and piers of the ruined chancel which have wholly perished.

The relics represented in the photographs sent for the inspection of the members of the Institute consist of some sculptured fragments of the tomb of Robert Chamber, whose name occurs in 1507 and 1518 in the lists of the abbots of Holm-Cultram; these fragments were disinterred in the course of last year. Also, a representation of the incised sepulchral slab, that appears by an inscription around the verge to have been the memorial of William de Rydekar, who was abbot in 1434; the date of his decease has not been ascertained: this slab was found a few weeks ago. The third photograph presents a sculptured achievement of the arms of the Monastery in the time of Abbot Chamber, as shown by his device and initials. This relic, now much damaged by injury or exposure to weather, has been built into the wall of a farm-house, near the site of the Abbey.

A few observations on these fragmentary relics of the once powerful and wealthy Monastery of Holm-Cultram may be acceptable. The incised memorial of the abbot is a slab in fair preservation, broken, however, into two pieces. The design is a crosier, with large simple foliations around its head, or volute; on the dexter side of the staff is an escutcheon charged with a cross moline, on the sinister side a second escutcheon with a lion rampant. These are the arms usually assigned to the abbey, as may be seen in the list given in Nasmith's edition of Tanner's Notitia Monastica, in Edmonson's Heraldry also, and elsewhere. Immediately over the head of the crosier is introduced a rose, which may have some significance as a device or ornament, not, however, ascertained. The crosier and the accompanying escutcheons are placed within a trefoil-headed arch, which is decorated with finial and crockets, and is supported by side buttresses terminating in finials, in the usual style of the period. Around the margin of the slab, on three of its sides, the upper side bearing no inscription, is the following legend[3]:—

✠ Hic. iacet. Willelmus. Rydkar. Abbas. xx^{o} ✠ de. Holme. Coltran[4] ✠ cujus. anime. propicietur deus. amen ✠.

[1] Vol. ii. p. 55. Stevens' Collections were published in 1723.

[2] Vol. v. p. 593.

[3] The contracted words are here written *in extenso*.

[4] "Holme Coltrayne," in Valor Ecclesiasticus.

It may be noticed that at each corner of the slab there is introduced a cross, instead of the single initial cross that is usually found in sepulchral inscriptions. The lists of abbots given by Browne Willis, Stevens, and the editors of the new edition of Dugdale's Monasticon, are by no means complete: fourteen names only have been recorded; of these eleven are enumerated as previous to William Rydkar, who was, as we learn from the inscription on the grave-slab lately found, *abbas vicesimus*. A considerable interval occurs in the list, Robert, whose name precedes that of Rydkar, being entered as occurring in 1294.

Robert Chamber, the mutilated fragments of whose memorial were brought to light last year, as has been already stated, and are shown in one of the photographs exhibited, occurs as abbot in 1507 and 1518. The porch at the west end of the conventual church appears to have been erected by him in the former year, as shown by the inscription over the door before noticed, and likewise given by Bishop Nicolson in his account of the church from personal survey in 1703.[5] He describes also the abbot's rebus, or device, as seen on the inside of the roof of the porch, namely, a bear chained to a pastoral staff passed through a mitre, and gives certain inscriptions that were placed on the north and south sides of the porch, and, below them, the king's arms, France and England quarterly, also, as Bishop Nicolson supposed, those of the abbey, a cross flory and a lion rampant.

The fragments that have lately been found may have formed the side of the tomb, or have been a portion of some shrine-work or the like. In the central part of the design is seen the abbot, seated, holding his pastoral staff, and on a scroll over his head may be decyphered—Robert Chamber. At his left hand there appear to have been nine kneeling figures, and the like number at his right. These doubtless represented the monks of Holm-Cultram, and there are scrolls over all the figures that probably bore their names respectively. The number of persons forming the congregation of the ancient foundation has not been stated; but in 1553 sixteen are enumerated, exclusive of the abbot, to whom pensions remained payable.[6] At the end of this singular series of little figures, on the left, is seen an angel, of somewhat larger proportions than the supposed monks, that kneel in a row before him. This angel likewise is kneeling, and from his hands, as it would appear, proceeds a long inscribed scroll that runs along the entire length of the sepulchre. The legend, and also the whole of the work, is much mutilated; but the words that may be decyphered are probably as follows:—[Pray] for abbot Robert Chamber . . . And emong, . hys . . . concluding (after an interval of several words) . . days here lyven was.

Behind the angel, on the extreme left, may be noticed an escutcheon charged with the rebus of a bear with a crosier passed through a mitre, accompanied by the abbot's initials—R. C.—and, at the extreme right, behind the last of the kneeling monks, a little chained bear again appears, erect, and holding in his mouth the end of the long inscribed scroll.

The details of this curious sculpture have been thought worthy of so full a descriptive notice, for the sake of inviting attention to a representation of the conventual *familia*, the abbot accompanied by the entire congregation of his house, as far as we are aware, unique. In the photograph

[5] Nicolson and Burn, Hist. Cumb. vol. ii. p. 180.

[6] Browne Willis, Hist. Abb., vol. ii. p. 55.

are shown with the three fragments of the singular subject that has been described, and which unfortunately were not arranged by the photographer in their proper order, some fine portions of early English and of Flamboyant work, that suffice to indicate the rich character of the architectural details of Holm-Cultram, now so sadly destroyed.

The third photograph represents the much-damaged and weathered sculpture of the arms of Abbot Chamber: this is affixed to the wall of a neighbouring farm-house. The shield, *à bouche*, and of the elaborately escalloped fashion of the period, displayed, in the first quarter, the bearing of the monastery, a cross moline; in the fourth quarter, the lion rampant, already noticed; the second and third quarters being charged with the rebus and initials of Robert Chamber. This boldly carved escutcheon is ensigned with a mitre held by two angels, that appear flying above; and the supporters of the shield are a lion on the dexter, a chained bear on the sinister, side.

In the new edition of Dugdale's Monasticon, in the account of Holm-Cultram, vol. v. p. 593, an escutcheon is introduced in the initial letter that seems to be intended to give the arms of the Monastery, but differing wholly from those that have been described. The coat resembles that of Richard Earl of Cornwall; the colours are not given; the bearing is, within a bordure bezanty a lion rampant (not crowned) holding a pastoral staff. No authority has been found for these supposed arms of Holm-Cultram, and it does not appear that the Earl was a benefactor to the house. On the other hand, it has been in vain sought to ascertain the origin of the two bearings that appear unquestionably, as before noticed, to have been ascribed to Holm-Cultram, the cross moline *or*, and the sable lion. There exists, however, considerable uncertainty in regard to the foundation of the Monastery, which is ascribed by Leland to Alan, son of Waldeff, or, according to another account, to David I. King of Scots, whose son Henry was a considerable benefactor, and has been named by some writers as the founder, in A.D. 1150. Henry II., King of England, took the abbey under his protection; and having confirmed the grant of Holm-Cultram, was regarded by the monks as patron of the house, their possessions were moreover confirmed to them by Richard I., Edward I., Henry VI., and other sovereigns. It was common for a king to be considered founder of a Monastery, when he was in fact only a later benefactor; the occurrence of the royal arms on the west front of the conventual church and also upon the Common Seal of the Monastery appended to the Surrender, as described in the recent edition of Dugdale's Monasticon,[7] may probably thus be explained. In that instance the shield bearing three lions passant is held by two monks, under whom is a lion. The principal device is a figure of the Virgin with the infant Saviour; on one side stands a king crowned, on the other an abbot with a crosier.

The abbots of Holm-Cultram were on several occasions summoned to Parliament. It does not appear that the use of the mitre had been formally conceded; but it would seem to have been assumed by both the abbots whose memorials have been described. The mitre indicated that the abbot had episcopal jurisdiction within the abbey, so as to exclude that of the ordinary, an exemption which the religious houses seem to have been always desirous to obtain, for by being immediately under the jurisdiction of the Holy See they enjoyed greater freedom.

[7] Vol. v. p. 594.

It may be scarcely necessary to point out that the device accompanying the memorials of Abbot Chamber may be regarded as of the nature of a rebus, the bear being allusive to the second syllable of the name. The family of Chamber had an ancient residence at Wulstey Castle, on the shores of the Solway, about three miles west of the abbey. They held that stronghold as early as the reign of Edward I. It was in ruins in the time of Camden, who mentions the tradition that it had been built by the abbots of Holm-Cultram as a place of security for their valuable possessions, and that amongst these were the magic treatises of the noted wizard, Michael Scott, who was a monk, according to local story, of the Monastery to which the foregoing notices relate.

Brigadier-General Lefroy, R.A., exhibited four specimens of fire arrows of the seventeenth century from the Woolwich Museum, and described their make and use; Mr. Hewitt made also some additional remarks. The subject of these remarkable specimens of the practice of mediæval gunnery has been since more completely worked out by General Lefroy, and will be given as a memoir in a future number of this Journal.

An account of recent Roman discoveries at Cirencester, by Professor CHURCH, M.A., was then read.

"In levelling the new cattle-market just beyond the railway-station in Acman Street, evidences of an extensive burial-place were discovered. On February 28th in this year, several sepulchral urns and two stone coffins were disinterred. The largest urn is of excellent shape, and is nearly perfect. Some bones, earth, and a portion of a lid, with a central boss, were found in it; but it contained some still more interesting objects. Among these may especially be noted a glass bottle, quite perfect, of exceedingly pale green glass, very slightly corroded. A terra-cotta lamp found with it must once have been an excellent example, but it has suffered from injudicious cleaning, and the effects of a calcareous incrustation. It has three figures in action, apparently plucking something from a large bundle tied in two places above their heads. This urn also contained two brooches, one has a plain pin and catch like the safety pin of the present day; the other is of the same construction, but more ornate in design. A few coins were also found either in or close to this largest urn; but they are very poor, and have not been thoroughly examined. It is probable that if any really good coins and objects in metal have been discovered, they have not found their way into the Corinium Museum. The greater number of the other urns were in fragments. Two stone coffins were also exhumed, in one of which portions of the bones of a child were found.

A second find has still more recently occurred. This is in the "Leauses." Pottery has here also been found; not only urns, but fragments of Samian ware and of common red tiles. Several bases and other portions of pillars have also been exhumed: two of these are worked stones. I have not yet had an opportunity of measuring a third and much finer specimen, which has been just found on the same site. I have only seen one coin from this second excavation. It is of a well-known type (third brass):—Obverse, DN MAGNENTIUS P F AUG.—Reverse, GLORIA ROMANORUM—a horseman stabbing an enemy."

In a further communication, Professor Church earnestly called attention to the very serious injury which was being done to the south-eastern portion of the ancient walls of Corinium, by using the stones of which it was built, and removing the gravel and concrete from its foundation.

A discussion ensued upon the best means of preventing such wanton damage to monuments of public interest. The Chairman, Dr. Rock, and others, related several instances of injury to such objects; and the impression prevailed that steps should be taken to invest some public authority with the power of protecting what might be considered public monuments.

The Rev. C. W. BINGHAM exhibited three original letters from an ancestor of the Rev. C. Chafin, the author of the History of Cranborne Chase, written to his wife from the battle-field of Sedgemoor, which were read, together with the following remarks.

"The following simple private letters relate to an interesting period of English history, which has been rendered peculiarly familiar to us, within the last few years, in the brilliant pages of Macaulay. They have recently been exhumed from a bundle of old family papers by H. C. Dashwood, Esq., of Sturminster Newton, Dorset, who has kindly put them into my hands, to make any use of them I may think fit. Thousands of similar documents must be lurking in muniment-chests and portfolios throughout the country, though it is unfortunately the case that their owners but rarely seem to perceive the importance of bringing them, if possible, to light. How many doubtful questions might be solved, and points of obscurity cleared up, by their publication, none but the historian himself can estimate.

The writer of these letters—for which, however, I claim no such probable merit—was Thomas Chafin, Esq. signing himself by his pet-name "Tossey," of Chettle, in this county, who married Ann, daughter of the well-known unsuccessful Royalist, Colonel John Penruddocke, of Compton Chamberlayne, Wilts, and was grandfather of the Rev. William Chafin, the last of the name, a great humorist, whose Anecdotes of Cranborne Chase have lately been the subject of some discussion.[8]

The first letter is dated "from Mrs. Bestlands in Dorchester, Monday June y^e^ 15th /85," the day after the "confused and indecisive action (as Macaulay calls it) at Bridport, such as was to be expected when two bands of ploughmen officered by country gentlemen and barristers were opposed to each other." The writer, it will be seen, had some cause of discouragement even before he entered on his campaign. "I am very well" (he writes) "soe far in my journey, but mett with y^e^ bad new's here of my Cos: Wadham Strangways[9] being barbarously killed by the Rebells yesterday morning, a younger Sone of Coll: Cokers likewise killed at the same tyme. Coll: Cokers eldest Sone, And Mr. Williams of Shiltern taken Prisoners. My Cos: Strangways kill'd as he was taking horse. Mayjor Stiles saved himselfe in a plat of kidney beanes. Mr. Churchill of Muston saved himselfe by running up into the Garrett. I am goeing as fast as convenient I can thither. Wee have a great Army against them. it seems the

[8] Amongst the other peculiarities of this singular old divine, who died in 1818, in his 86th year, was his passion for cock-fighting, which he thus favourably contrasts with horse-racing: "In our days of refinement this amusement of cock-fighting hath been exploded, and in a great measure abandoned, being deemed to be barbarous and cruel; but in this respect the writer thinks differently, and believes it to be the least so of any diversion now in vogue, and nothing equal as to cruelty to horse-racing, &c." Anecdotes, Edit. 1818, p. 52.

[9] Mr. Chafin's maternal grandfather, Sir Thomas Trenchard of Wolveton, was brother of Grace, Lady Strangways, the unfortunate Wadham Strangways's grandmother.

Rougues in Birtport had Comunicacon w^th^ them at Lyme, w^ch^ was the Cause of the surprize on Cos: Strangways & the rest. I don't here of any more killed Gentle or Symple of our side, but of the Rebbells two or three kill'd, & 2 or 3 & twenty taken prisoners. I was forc't to take Cottington having noe other soe fitt, therefore if you please to come home you must send to Chettle either for Will horner or Will: Lambert —— & y^e^ Colt will draw you home almost as well (as safe I'me sure.) I have Tho: Clem^ts^ & the Gardiner well armed along w^th^ me. Give my Service to all my friends & blessing to bratts, and let Nancy take true Love from her Deare TOSSEY."

We have no further news of Mr. Chafin, till some three weeks later, when he writes, as it would appear, from the actual field of the Battle of Sedgemoor. His letter is thus addressed:

"This

"To Mrs. Chafin at Chettle house

"Present.

"Monday, ab^t^ y^e^ forenoon July y^e^ 6^th^ 1685.

"My dearest Creature this Morning ab^t^ one aclocke The Rebbells fell upon us whilest wee were in our tents in Kings Sedgmore w^th^ there whole Army. Wee had for about an houre a brisk fight, but at Length away they Ran. Wee have Lost but few men, & as yet know of but one Comander killed. Wee have kill'd & taken at least a thousand of the Rebbells. They are fled in to Bridge Water. 'tis say'd wee have taken all their Cannon, but sure it is that most are, if all be not. A Coate w^th^ starr on't is taken, 'tis run through the back. By some 'tis say'd the Duke Rebbell had it on & is killed, but most doe think that a servant wore it. I wish he were killed, that the warr may be ended. It's thought he'l never be able to make his men fight againe. 3 load of Armes wee have alsoe taken. My service to Cos: Lown. I thanke God Almighty I am very well without the least hurt, soe are our Dorsetshire friends, preethee let Biddy kno' this by the next oppertunity. I am Thyne onely Deare TOSSEY."

Another letter follows on the morrow:

"Bridgwater tuesday July y^e^ 7^th^ 1685.

"Wee have totally routed y^e^ Enemys of God & the King, & can't heare of 50 men together of the whole rebell Army. Wee pick them up every hour in the Corne feilds hedges & diches. Williams the late Duke of Monmouths Vale De chambre that wayted on him in his chamber is taken, who gives a very ingenious acc^t^ of the whole affayre, w^ch^ is to Long to write. The last word he s^d^ to him was at the tyme w^n^ his Army fled, that he was undone & must shift for himselfe. We think to March with the Generall this day to Wells on our way homeward, or any where he goes, but 'tis discourst he marches thither. At present he is two miles off in the Camp, soe I can't certaynely tell whether he intends for Wells or not, but I veryly believe he doth. I shall be at home certainely on Saturday at farthest. I beleeve my Deare Nan would for £500 but her Tossey had served the King to the end of the Warr. I am thyne my deare Childe onely for ever.

"My Cos: Law: Culliford is an Officer here, & presents you with his service."

Whether Mr. Chafin's confident expectation was fulfilled or not, we have no means of ascertaining; but it seems likely that the journey, to

which reference is made in the closing letter, was taken from Chettle; and that Mr. Speak had been one of the unhappy companions of the Duke, whose capture, by a curious coincidence, was made within a very few miles of that place.

"This

"To Mrs. Chafin at Chetle house near Blandford In Dorst ss.

"Present.

"*Frank.*—Tho Chafin.

"Green street July ye 16th /85 London.

"Yesterday abt 5 afternoon wee came safe to London haveing placed Mr. Speak in Fisherton Goale, for notwithstanding his pretences of Innocency one Kids (late Gent: man to Sir Nath: Napier,) who was taken Prisoner after the battaile at Weston, knew him to be in Monmouths Army, therefore Tom Pen:[1] and Maurice Bocland[2] comitted him & Cos: Jno Clerke came with us to towne. I am very well, and now in greater probability (in ye Souldiery way) than ever. The King gave Tom Erle & selfe a Complimt in these words. Wee were presented by Ld Churchill to the King as Persons that Came voluntarily after our comanders were dismist, & at the service at Weston. The King gave us his hand to kiss & told us (*erasure in MS.*) such men he knew would serve him (*do.*) & the whole Company gazed on us as somewhat extraordinary, & enquired who wee were, few of our acquaintance being present. Mr. Chaldecott had a hundred Guineas given him by the King for Rideing post wth news of Monmouths being taken, by wch may be gathered 'tis better Rideing post with good News than fighting. Those who had their bones broake will want such a sum I doubt, tho' the King ought to be served without reward, & shall for ever be soe by me; he has & will be noe doubt mighty kind to All those who serve him well. Sister Chiffinch is at Gravesend, & Comes to towne Monday. Unckle Chafin's troope is full & to spare. Pray let ten Cock chickens & two hens be sent to Tom Erles speedily. I am in doubt they may be lost. Also take care of your charge. I hope to be at home Saturday sennight. My Ld Clarendon says I shall know in a day or two. Ye Late Duke of Monmouths head was sever'd from his body yesterday Morning on tower hill at 10 or 11 forenoon. Lord Grey will soon be there too. Blessing to Bratts, soe fare well. My Dearest Deare Nan quoth Tossey."

One only letter I will add to these, from Sir William Portman to the writer, of a somewhat later date.

"ffor

"The Hond Captain Chaffen att his Chetle

"These

"Jully ye 22nd (1688)

"Dear Tho,—Altho the death of the good Duke of Ormond hath prevented our meeting to day, I hope noe thing will hinder my seeing yo at Cheterwood tomw row 6 a clock, a hunting. For your London journey if it's not concerne of a perticuler day's appoyntment, one day will not

[1] "Tom Pen," was doubtless Mr. Chafin's brother-in-law, Thomas Penruddocke of Compton Chamberlayne, eldest son of Col. John Penruddocke.

[2] Maurice Bockland, of Standlynch, married Joan, an elder sister of Mrs. Chafin's. Mr. Bingham has a letter written and franked by him to Mr. Chafin, dated May 2nd 1689, giving some interesting details of parliamentary proceedings.

breake y^e^ squar's. If y^e^ can be at y^e^ hunt, it will be what will be verry agreeable to S^r^ N: N: [Sir Nathaniel Napier,] & obliging to y^rs^ to command WILL PORTMAN.

"My service to the good Lady."

The only liberty I have taken in transcription has been to separate the sentences, and to add occasional stops, which are pretty generally wanting in the originals."

Antiquities and Works of Art Exhibited.

By the Rev. J. BECK.—A collection of celts and other stone implements principally acquired in the North of Europe. They presented a very instructive exemplification of the characteristic types of Scandinavian implements and weapons, chiefly of flint, and found in Gothland, also in Danish Zeeland; several remarkable specimens from Schrœvenborn, on the north of the Bay of Kiel, with a choice series selected for Mr. Beck by Professor Herbst, inspector of the Danish Museum of Antiquities. The peculiar forms of the ancient stone implements of Denmark and other countries of the North have been illustrated by Professor Worsaae in several treatises, especially in his "Afbildninger," a selection of the most important types displayed in the Museum at Copenhagen; recently also in the plates given by Sir John Lubbock in his translation of "The Primitive Inhabitants of Scandinavia," by Professor Nilsson. Amongst numerous examples in Mr. Beck's collection may be noticed axes, chisels, gouges, &c., a spear-head of black and whitish flint, length 11 in., a semilunar knife of horn-coloured flint, length nearly 8 in., serrated on the inner edge only, a hammer-axe, of singularly beautiful form (compare Afbildn. fig. 24), and a javelin-head of wood, with lateral grooves in which are fixed flint-splinters set in some tenacious resin. See Nilsson, Stone Age, translation by Sir John Lubbock before cited, p. 46. One of the most interesting relics exhibited by Mr. Beck is here figured, of the same size as the original. It is a triangular-shaped arrow-head, with the sides and angles equal, and with chipped edges, of brown flint (Tresidet Pilespids, Worsaae, Afbildn. fig. 49, of rather smaller dimensions), perfectly symmetrical in form, chipped with delicate precision (see woodcut). A similar specimen from Sweden is figured in Nilsson, Stone Age, before cited, p. 43, pl. 11,

fig. 40. Mr. Beck sent also several stone implements found in Ireland, including celts dredged out of the bed of the Boyne, near Drogheda, in 1853, a specimen from the bed of the Shannon, near Limerick, and an ovoid stone, length 5½ in., stated to have been found in the cromlech called Leabhar Caille, in the barony of Fermoy, co. Cork. Also a broken celt of white flint, much polished and very symmetrical in form; it was found on St. John's Common, Hurstpierpoint, Sussex.

By the Rev. C. W. BINGHAM.—Three original letters relating to the

Battle of Sedgemoor. Also two gold rings found recently near Dorchester. One was inscribed, "Honnur et vie," intermixed with foliage. Its date is probably about the year A.D. 1470. The other was in the form of a buckled strap or garter, with a serpent's head at the tongue. It was inscribed, "Mater dei memento," and a letter or two under the tongue (probably "mei") that was undecipherable. Its date was about A.D. 1500.

By Mr. SHOUT.—Two Nuremberg counters of brass found in excavating in the churchyard at Yeovil; similar examples are figured by Snelling. One was inscribed "I H S," within a crown of thorns, and "Sig. nomen. Domini." On the reverse, a floriated cross, with the inscription, "O mater Dei, memento mei." On the other was an orb surmounted by a cross *patée* within a sexfoil. On the reverse, a rose with a fleur-de-lis and a crown triangularly placed. No legends.

June 7, 1867.

OCTAVIUS MORGAN, Esq., M.P., and V.P., in the Chair.

On commencing the proceedings the Chairman alluded in feeling terms to the great loss the members had sustained by the decease of Mr. Edward Hawkins. At the first formation of the Institute he was one of the most active and zealous supporters of the movement. His great knowledge of artistic subjects generally, and particularly in that branch of antiquities to which he was more especially devoted—Numismatics, made him a most valuable coadjutor on all such matters; and the great courtesy and attention with which he was ever ready to proffer his special knowledge made his assistance as agreeable as it was valuable. From the first he accepted the post of Treasurer of the Institute, and continued to occupy it till within the last few years, attending with great regularity, and frequently presiding at their monthly meetings.

A paper by Mr. George Petrie of Kirkwall, describing some excavations of remains of pre-historic buildings at Skaill in Orkney, was read. Some years ago the waves of the Atlantic had washed away the sand from what seemed to be foundations of extensive buildings at the brink of the bay of Skaill. From time to time portions of these buildings had been opened out, and very lately the entire ground-plan was cleared. A large "kitchen-midden," 15 or 16 ft. high, was found at the side of the building, and numerous fragments of bones, etc., were discovered in it. Some of the objects had been sent to the Antiquarian Museum in Edinburgh. The plan of the buildings showed a group of chambers and cells ranged irregularly on both sides of a long zig-zag or winding passage. In some of these chambers were found stone kists, stones on edge indicating hearths and the division of the chambers into compartments. Beneath one of these hearths a thick clay urn had been found, and above one of them was found a skeleton. The relics appeared to indicate a very considerable antiquity. Mr. Petrie's paper was accompanied by a careful ground-plan of this remarkable series of structures; and we have great satisfaction in reporting that this plan will be carefully engraved and the essay printed entire by our worthy friends and coadjutors in the North, the Society of Antiquaries of Scotland.

Mr. GEORGE SCHARF, F.S.A., exhibited a curious triptych, the property of Evelyn P. Shirley, Esq., composed of three leaves of equal size, and ingeniously contrived, with hinges of a peculiar construction to fold one

over the other. Each leaf contained on the inside a half-length portrait of one of the children of Philip le Bel and Johanna of Castile and Arragon. The central portrait represents the Archduke Charles, afterwards the Emperor Charles V., as a boy about four years old, wearing a low cap of gold brocade and a crimson tunic. The imperial arms and collar of the Golden Fleece are displayed on the green background in the arched panel over his head. In the left-hand compartment is his elder sister Eleonora, married afterwards to the King of Portugal and to Francis I. of France, wearing the French hood and veil, a brown dress and crimson facings so frequently seen in pictures of the period. The right-hand panel exhibits the second sister Isabella, or Elizabeth, afterwards married to the King of Denmark. She appears as a mere infant, with a white covering to her head surmounted by a brown fur cap, nursing a doll, which is a quaint specimen of the manufacture of the day, and represents a lady dressed in the height of mediæval fashion. The triptych appears to have been painted in 1503, previous to the birth of Ferdinand, the second son. Mr. Scharf showed that it belonged in all probability to Henry VIII., and referred to the following entry in a list of the crown pictures at Westminster Palace in 1542 :—"Item, a *folding* table with the pictures of the King of Castile's children."

Dr. ASTLEY, M.D., of Dover, contributed an account of the "Recent discovery of Roman remains, with Urns and other relics near Dover."

"The sepulchral deposits and vestiges of the ancient inhabitants of the Roman Dubris that have been brought to light from time to time are of considerable interest. A considerable number of relics, personal ornaments, and pottery, have been preserved in the Dover Museum, where they present instructive evidence of the usages or the manufactures of former occupants of the place. Not long since many urns and other Roman antiquities were disinterred near the town, on the road towards Charlton ; of these a notice was communicated to the Institute, in whose Journal it has been published.

More recently a discovery of interest has been made, in another direction, in the vicinity of Dover. The relics were dug up during some excavations made for the purpose of obtaining brick earth in a valley a short distance from the high road that leads from Dover to Folkestone. A photograph of these ancient objects is sent for the inspection of the Society. It will be seen that the two largest urns in the group present certain peculiarities not undeserving of notice. The largest of these vessels is ornamented with bands at intervals like the hoops of a barrel, and in the intervening spaces there are projecting knobs arranged symmetrically, so that these projections, four in each band, alternate in their position, those of the lower circle being disposed in the spaces that intervene under the knobs in the upper band. The intention of these projecting appendages has not been ascertained. This urn measures 11 in. in height ; diameter at the mouth 6½ in., at the widest part 8½ in. It contained, as did likewise the second, hereafter described, incinerated human bones.

The second urn, which fell in pieces shortly after the exhumation, is of bright red color, with a diagonal pattern slightly impressed or pricked over the surface ; so slightly indeed as to be scarcely shown by the photograph. This vessel measures 9¾ in. in height by 5 in. in width across the mouth. The remarkable feature, however, of this urn consists in the fact that it had been fractured and repaired by numerous rivets previously to its use as an *ossuarium* for containing the ashes of the dead. Some black cement

had been used under the rivets to fill up the inequalities of surface. This substance appeared at first sight to be bituminous, but it was not consumed by heat. The urn contained a bronze fibula, shown in the photograph; this object is of simple fashion—the *acus* has a spiral coil where it is attached to the bow, and thus had a sufficient degree of elasticity to answer the required purpose. The *acus* was broken by rough handling. A Roman coin found with the relics that have been described appears in the photograph near the bronze objects.

The vessels of the highly-esteemed Samian ware, of foreign production, are frequently found repaired with leaden rivets. It may be supposed that the urn here described was of some valued kind of ware, considered worthy of being thus preserved after being much broken.

A third urn, of smaller dimensions, an *olla* of ordinary form, is ornamented in the usual manner with lines slightly traced or scored on the surface. There were also two *tazze* or cups of elegant fashion, but such as frequently occurs, especially amongst the *fictilia* produced in the extensive potteries in the Upchurch Marshes, near the mouth of the Medway. These smaller vessels probably contained some food or other substances customarily placed in the sepulchral depositories of the Romans.

Near the spot where the discovery occurred was found a skull, around which there was a circlet of bronze, shown in the photograph; also a few brass coins of Severus and Constantine, and one of Posthumus. I am not aware of any similar discovery of an ornament for the head in the numerous investigations of Roman burials. The circlet, now broken into several pieces, was originally formed in two portions, united at the back by a kind of joint; the hoop, which in other parts is round, being filed or otherwise rendered flat, so that the ends overlap, and each is pierced with two small holes, possibly for rivets, through which, however, a fine cord may have been passed to serve as a means of attachment, or possibly serving to allow a certain degree of movement, thus obviating the rigidity of the hoop. The ends terminated in front in small knobs, the circlet being penannular; thus, it may be supposed, a small space was left between them, so as not to press too closely on the brows. There seems to be no doubt, by the statement obtained from the man who found the skull and removed the metal hoop from it, that it had actually been thus placed at the interment of the corpse. When the portions of the circlet are put together, it measures $5\frac{1}{2}$ in. in diameter by about 4 in. The ring is rather thicker in the part believed to have been the front; it tapers away towards the joint or fastening, being there about the size of a a crow-quill."

Several remarks were made upon some of the points raised in this communication; among others, Mr. Greaves remarked that the large *amphoræ* found in the Troad were often found broken and riveted together with lead.

Mr. Shakespeare Wood, Secretary of the Archæological Society recently established in Rome, showed two large and finely-executed sketches of an interesting discovery lately made there. After adverting to the practice of exploring, which is followed extensively as a profession in Rome, small companies or parties being often got together quite hurriedly by speculators, he mentioned that a party of speculators had lately opened out the quarters of the seventh cohort of the "Vigiles." Upon the walls were numerous *graffiti* or scribblings, by the men on duty, which showed the occasion of the festivities held there, and of the occupation of the men.

These discoveries were very curious and often important, as in this instance. The brickwork of the house was of a style only used in the time of Augustus, and there could be no doubt of its date. The "Vigiles" were established by Augustus, each cohort being assigned to watch two of the fourteen regions into which Rome was divided. Among the *graffiti* on the walls of this barrack of the "Vigiles," the word "sebaciaria" had puzzled them much—by some it had been construed to mean illumination by means of tallow; by others it was thought to indicate a kind of revelry where the soldiers drank ale-posset.

Mr. PARKER said, in reference to the importance of these discoveries, that one of the *graffiti* in this house of the "Vigiles" established the date of the birth of Alexander the Great. Historians had failed to mention the day of the birth of Alexander the Great, neither had they named the birth-day of Alexander Severus, who was so called from having been born on the same day as Alexander the Great. A Roman "Vigil" scratches a note of the jollification made by his cohort on the birth-day of Alexander Severus, and thereby establishes the date of the birth of Alexander the Great. The Pope took a great interest in those excavations, and encouraged archæological research by his influence and by every other means in his power, but his pecuniary means were exceedingly limited; all explorations were expensive proceedings, and any help that could be afforded in such a case would be most welcome.

The Very Rev. Dr. ROCK thought the doubtful word did not refer to "ale-posset." He gave some account of his own experiences with regard to discoveries in Rome, and confirmed what had been said respecting the great interest shown by His Holiness the Pope in the promotion of explorations and of every purpose for the advancement of literature and the arts. Unfortunately, his funds were not in a flourishing condition, and it was not in his power to contribute, as he would wish, to the expenses involved in explorations.

Mr. WOOD continued his remarks and referred to the discoveries which had been made at the private palace of Adrian, and which were still in progress.

The Rev. R. P. COATES exhibited some specimens of pottery, personal ornaments, &c., lately found at Horton Kirby, Kent, of the discovery of which he gave the following account.

"In the summer of 1866, the first stone of a Home for Little Boys was laid by the Princess of Wales. It is situated on the south side of the London, Chatham, and Dover Railway, very near the Farningham-road station. As a natural consequence, many houses have sprung up both close around it, and at a little distance off, on the north side of the railway, further down towards the river Darenth; this is the site of the Anglo-Saxon cemetery, some of the contents of the graves in which are exhibited on this occasion.

As early as the autumn of 1866, in digging the foundations of some cottages, eleven skeletons were cut through, one said to be that of a man 6 ft. 6 in. high. All were lying nearly parallel, and with the feet to the east. Very little was said about the discovery at the time, and I, for one, heard nothing of the matter.

In May, 1867, the week ending on the 25th, about 100 yards to the south of the first graves, and almost close to the railway embankment, in digging the foundations, &c., for some more cottages, four or five graves were opened, some with feet to the north, two lying across the other, with

feet to the south-west. In these were found some black crumbling pottery, of inferior quality; one bronze fibula, gilt; two knives, with a piece of a third; one whetstone by a knife, and having rust on it; bones, but these owing to the shallowness of the graves, at the present time at least, soon crumbled to pieces. Of the graves generally I may remark here that they were constructed in the surface soil, in no case was the solid chalk dug deeply into, not, in fact, much more than a couple of inches, and in addition to being shallow, they were very short, those of the females only a little more than 4 ft. long, so that the bodies must have been bent both at head and foot. The skulls were constantly found projecting forwards or sideways, in one case both ways, above the body; some had been taken off altogether, perhaps by the plough, leaving the neck bone standing up. Owing to the action of the plough and the shallowness of the graves the bones of the feet had doubtless perished, and were scarcely found at all.

I was not present at the first find, hearing of it only on Sunday, May 26.

On Monday, May 27, I saw a skeleton laid bare, no ornaments were found; this was one of the very short graves. On Friday, May 31, early in the morning, a large grave was opened, in which it was said nothing was found. Later in the day, in the presence of C. Roach Smith, Esq. and myself, the grave of a young female was opened. The feet were to the north; the grave was a little more than 4 ft. long, and the body was bent, with the head turned up and sideways on to the left collar bone, whereby the left jaw-bone was discoloured through resting on a bronze fibula. In it were found two pieces of bronze; a sheath discoloring one of the ribs; on the bone of the pelvis, left side, an iron ring, with two keys and knife, rusted by them; on right side a bone spindle-whorl; between jaw and collar-bone a small bronze fibula, gilded, with piece of coloured glass in it; the teeth were very perfect, and evidently of a young person; in the lower jaw a tooth not up, being perhaps a milk tooth, several of which were found above it. In the afternoon, during our absence, four graves were opened, one large; two of children, very small, one having only dislocated bones, the effect of the plough. Nothing was found in them, we were told.

On June 1, in the presence of Mr. C. Roach Smith and myself, a grave was opened. It was that of a very large man, the thigh-bone, of great circumference, was 18½ in. long. This was the skeleton with the neck-bone upright, and the skull gone: nothing was found in this grave. The next grave was that of a woman, it was thought, but it was of a person of large size, the thigh-bone being 17 in. long. In it were found a knife and four nails of iron, which had perhaps held together a rude coffin, of which no traces remained.

Altogether, from the complete absence of weapons, spears, and swords in the men's graves, and the plainness of the ornaments in the women's graves, Mr. Roach Smith is disposed to infer that the people were very poor—thralls, not warriors; and the shallowness of the graves avoiding the solid chalk, which is very hard, points to the same conclusion, implying an absence of good tools. The interments show no sign of Christianity, their varying directions are against the notion of Christian burial. Still the date may have been after Christian times, perhaps as late as the 8th or 9th century."

Antiquities and Works of Art Exhibited.

By the Rev. GREVILLE J. CHESTER.—Specimens of Greek and Byzantine gems and jewellery, lately acquired in the East. They consist of bronze ring-seal, found near Tarsus.—Bronze do., in the form of a shoe, inscribed with a lizard, perhaps Gnostic, found at Bacoli, near Naples.—Bronze seal, found at Samaria.—Bronze seal, an archer, found in Syria.—Iron ring-seal, bought at Constantinople.—Jade-stone derveesh's amulet, with a Cufic inscription.—Three terra-cottas, found in the mounds of Crocodilopolis (Medinet), in the Fyoum, Egypt.—Stone crocodile from do.—Stone figure, with Greek inscription, from do.—Wooden platter from do.—Bronze lion from do.—Bronze stand or altar, perhaps Coptic.—Chafing or incense dish, perhaps Coptic.—Candlestick, perhaps Coptic, from Medinet, in the Fyoum.—Coptic cross, from the ancient convent of Dayr Bablùn, at Old Cairo (Babylon).—Copper bird, Byzantine or Arab work.—Bronze foot, with Oriental inscription, bought at Smyrna.—Mediæval seal, with cardinal's hat, Italian.—Hebrew charm.—Charm or amulet.—Greek ring.—Greek (?) bead in form of a vase, found at Arsinoe, Medinet, in the Fyoum.—Collection of 22 Oriental seals, of Cufic, Arabic, Persian, Turkish, Hebrew, Armenian, and Greek work. One has a zodiac &c., and was, perhaps, a derveesh's amulet.—Collection of 12 Greek and Roman gems.—Do.—Roman paste, found at Pozzuoli, with the Farnese Hercules.—Jade bead, with a stag: Greek (?)—Rock crystal-seal, with a monogram, found at Smyrna.—Two Nicolo Oriental gems.—Lapis Lazuli gem.—Five ear-rings and two pendant ornaments, found in tombs at Alexandria: Greek.—Two ear-rings, Greek, found in Macedonia.—Ear-ring, found near Scutari: Byzantine (?)—Ring, Byzantine (?), found at Pesth.—Small terminal image, found at Athens.—Gem, apparently Gnostic, with an inscription in Roman, Palmyrene, and Phœnician (?) characters. It was bought at Smyrna.

By the Rev. H. HONNER.—An Indian jewel, supposed to be of great value. It was a white spinelle, which had been set in gold, with rubies round it. Its constituents were said to be very nearly those of the topaz. The late Major Honner received it as a reward for distinguished military services rendered in Ceylon to the late king of Kandi. It had been worn in the turban of the late king, and was probably an antique, the cutting being considered to be European.

By Mr. ALEXANDER NESBITT.—Two side-pieces of a casket of wood (probably walnut or chestnut), 13 in. long by 4 high. The insides retain traces of red paint, and have grooves for a sliding lid. On the outside are plates of bone or ivory, secured by numerous pieces of the same material, and ornamented in the following manner:—a broad border of rosettes, of varied design, runs round the whole, within which are, on the one, scenes of the chase, on the other, figures dancing to the sound of music.

In the first, hunters armed with a spear and a bow and arrow, and accompanied by huge, short-tailed mastiffs, attack a stag, and steal upon an unconscious hare of huge dimensions, while a leopard and a wolf are playing or fighting in one corner. The hunters are in a complete state of nudity, except that they wear pointed caps, and that one has a flying scarf. On the other, ten figures are represented in two groups of five each; two of these are blowing horns of elephant tusks, and one beating a tambourine and dancing in a grotesque attitude to the music. Another personage is skipping with a rope, and holding a garland in his left and a scarf in his

right hand. Two others are dancing with scarfs, which they wind about or over their bodies, and one holds a scarf and two garlands. One figure holds out a scarf, and a tall oblong box or frame, on the top of which are four balls, perhaps intended to represent flowers. The groups are separated by an object which may be intended to represent a door with curtains, or possibly a couch. The execution of these figures is rude, though spirited, and more particularly in the case of the animals. The figures are nude, except as regards the scarfs, which have been mentioned, and the anatomy of the muscles is ostentatiously marked. The hair is represented by round lumps.

This casket evidently belongs to the same class as that recently acquired by the South Kensington Museum from Mr. John Webb, who purchased it from the chapter of the collegiate church of Veroli, near Rome. On this last are mythological stories, as that of Europa, partly misunderstood and misrepresented, and grotesque dancing figures of the same character as those of the present example.

Other examples are similarly adorned. A casket in the sacristy of the cathedral of Volterra bears representations of the labours of Hercules; one in the public museum at Arezzo, wrestling figures; portions of a casket at Goodrich Court, the education of the infant Achilles by Cheiron the Centaur, and so forth.

All these are executed in the same quasi-antique style, and characterized by the same exaggerated demonstration of the form of the muscles, and the same treatment of the hair. The legs are usually very slender, particularly the ancles, and the feet small, while the arms are very fleshy and muscular; the knees are usually very prominent.

These peculiarities will sufficiently distinguish the works of this style from those of the antique period with which they have been frequently confounded, even by those well versed in ancient art. The use of mythological subjects, or of those taken from public games, may be readily explained, if we suppose these caskets to have been made at Byzantium. Some of them, particularly one preserved in the sacristy of the cathedral of Lyons, have medallion heads, with unmistakeable Byzantine head-dresses. A few pieces exist in which figures, treated in this quasi-antique manner, are in juxtaposition with others in the peculiar stiff style adopted by the Greek artists of the post-iconoclastic period, for the representation of sacred personages. One of these is in the British Museum; and a most remarkable one, representing the "Forty Martyrs," is in the Museum at Berlin. In both these the figures are accompanied by Greek inscriptions.

None of the ivory carvings of this style have afforded data for a precise determination of the time when they were executed; but it would appear certain that they cannot date from a period earlier than the ninth century, nor do they seem to be later than the fourteenth. Many were probably executed in the eleventh and twelfth, and they appear to have been brought into Italy in considerable numbers, as although entire caskets are rare, fragments are not uncommon. They differ much as regards the goodness of the execution; some, as for instance one preserved in the sacristy of the convent of La Cava near Naples, being admirably carved, while others are rude.

They are interesting to the student of the history of art, as showing that Byzantine art was not as exclusively religious as writers on the subject have usually assumed to have been the case; and that the traditions of the

mythology and the art of pre-Christian times, continued to exercise an influence in Byzantium for a very long period.

By Mr. M. H. Smith.—A massive gold fore-finger (or thumb?) ring. On the inside is the inscription "nul cy bien"; on the exterior, "p' Leweys." The impress is a lion. The ring was found on the tooth of a harrow by labourers when working in a field of Mr. W. Bell's, in the parish of Great Ormesby, Norfolk, on January 31, 1815. It weighs seventeen pennyweights, and was considered to be of late fourteenth century work.

By Mr. C. Durnford Greenway.—A steel seal, with the handle forming a nut-cracker, much enriched with good floriated ornament—seventeenth century work. Arms, three bull's heads erased, between as many chevronels.

On the 19th June the meeting of members for the reception of the Auditors' Report was held, Lord Talbot de Malahide in the chair. The Report (which appears on page 287) was read and unanimously approved, and, after a vote of thanks to the Chairman, the meeting adjourned.

Archaeological Intelligence.

It cannot fail to be interesting to such of our readers as may be connected with the western counties, to learn that the formation of an Archæological Society for Devonshire has been inaugurated in the ancient city of Exeter. The President of the Society is the Vice-Warden of the Stannaries, Mr. Smirke, to whose friendly co-operation the Institute has so often been indebted in investigations of the documentary and other antiquities of Devon and Cornwall. The historian of Tiverton, Col. Harding, and Mr. W. R. Crabbe, F.S.A., will take the part of hon. secretaries, and supply further information to any persons who may regard with interest so desirable a project.

A catalogue or index of reference to the principal examples of mediæval painting in England has long been in course of preparation by Mr. E. L. Blackburne, F.S.A. Such a general enumeration of the scattered relics of middle-age art and symbolism has been frequently desired. The work will be arranged in two parts, the first forming an index of all examples that exist or are recorded to have formerly existed in our country, showing their nature, date, and situations in churches or other buildings; the second division will present a catalogue of the various subjects represented, —portraitures, Scripture histories, allegorical subjects, moralities, &c. This combination will supply to the student of mediæval art a complete handbook of reference, such as has not, to our knowledge, been produced in any country. Subscribers' names are received by the author, at 33, Bernard Street, Russell Square. The work will form one volume, royal 8vo., price (to subscribers) 16*s*.

We have pleasure in noticing the recent production, by Mr. Henr Laing, the compiler of the valuable catalogues of Scottish seals, of a colored representation of the ceiling of Queen Mary's audience chamber in the palace of Holyrood, with its elaborate heraldic decorations, devices, and other details of beautiful design. A chromo-lithograph has been executed from Mr. Laing's drawing, and also a colored photograph on a smaller scale. Those persons who may desire to possess this memorial of the times of Mary Stuart, are requested to apply to Mr. W. M'Culloch, keeper of the Museum, Soc. of Antiqu. of Scotland, Edinburgh.

Notices of Archaeological Publications.

PAROCHIAL AND FAMILY HISTORY OF THE DEANERY OF TRIGG MINOR, IN THE COUNTY OF CORNWALL. By JOHN MACLEAN, Esq., F.S.A., &c.

WE have great pleasure in introducing to the favourable attention of our friends the first part of a Parochial and Family History of the County of Cornwall, containing the parish of Blisland, in the deanery of Trigg Minor in that county, by Mr. Maclean. The historical works and notices of the county have not hitherto obtained, or deserved, any high reputation. The earliest that we possess of any value is the "Survey" of Carew, first printed, after the decease of the writer, in 1602, and afterwards expanded in a somewhat enlarged form in successive quarto editions, of which the last was published under the careful editorship of Lord de Dunstanville. The only other independent historical work, of real importance, is the volume of the Magna Britannia, containing Cornwall, by Daniel and Samuel Lysons, which, though executed with all the learning and acute observation and research that might be expected from those excellent antiquaries, cannot be regarded as more than a correct *outline* of the physical features and archæological objects of interest contained in the county. The latest parochial history was edited, with some original matter, by the late Mr. Davis Gibbons; but the copious extracts from the unpublished manuscripts of Tonkin and Hals, on which the work was chiefly founded, have added but little to the value of it; and the unfortunate typographic inaccuracy of the work throughout the whole of it, has contributed greatly to impair its popularity.

In the part of Mr. Maclean's work now before us, it is impossible not to recognise immediately the learning and research of its author, and to discern the promise of a really useful and instructive county history. Our only apprehension is that a work, commenced on such a scale and plan, must necessarily be a work of great labour, and of slow progress, unless the author shall succeed in enlisting in his service co-adjutors not inferior to himself.

The present part contains (besides a rather copious introduction, not especially connected with the county) the parish and manor of Blisland, called in earlier manuscripts "Bliston" and "Bluston," and several other dependent manors that have since been severed from the principal lordship or manor of Blisland. In connection with these, a specimen of an old extent or survey of it has been printed, and very ample and careful biographical and genealogical notices of the principal families which have, from time to time either resided on it or become local landowners there. The volume is further illustrated with the armorial bearings of those families, and with various woodcuts of the local objects of primeval and ecclesiastical antiquity to be found within the district to which this part is confined.

Royal Archaeological Institute of Great Britain and Ireland.

BALANCE SHEET FOR THE YEAR 1866.

RECEIPTS.

	£	s.	d.
Balance at the Bankers', Dec. 31, 1865	67	13	6
,, in the Treasurer's hands, including Petty Cash	46	4	8
Annual Subscriptions, including Arrears	553	9	0
,, paid in advance for 1867	7	7	0
Entrance Fees	39	17	0
Life Compositions	84	0	0
Sale of Publications, &c.	39	18	0
Donations	1	1	0
Balance of Receipts, London Meeting, including Donations in aid of Expenses	336	10	6
	£1176	0	8

EXPENDITURE.

	£	s.	d.	£	s.	d.
Publication Account:						
Messrs. Bradbury & Evans, for Printing Journal	487	6	10			
Drawing and Engraving	90	8	6			
				577	15	4
Household Expenses:						
Rent, three Quarters to Christmas	97	10	0			
Hire of Meeting Room, &c., Arundel Society	16	16	0			
Secretary's Salary	78	0	0			
Drafts, Stamps, and Charges on Exchequer Bill	1	17	5			
Stationery, Printing, &c.	6	18	7			
Frames, Insurance, &c.	10	1	9			
Paid on Account of London Meeting	4	5	11			
				215	9	8
Library Account:						
For Books purchased, Binding, &c.				19	5	2
Petty Cash Disbursements:						
Messengers and Attendance	38	16	0			
Postages, and delivery of Journal	28	13	9			
Coals and Gas	4	6	0			
Carriage of Parcels	3	12	4			
Sundries, Cleaning, Repairs, &c.	5	10	6			
Cab-hire	1	17	9			
				82	16	4
Balance at the Bank, Dec. 31, 1866	144	15	3			
,, invested as per Account	100	0	0			
,, in Treasurer's hands, less Petty Cash	35	18	11			
				280	14	2
				£1176	0	8

Examined and found correct, June 7, 1867.

Signed { W. WARWICK KING, JOHN STEPHENS, } Auditors.

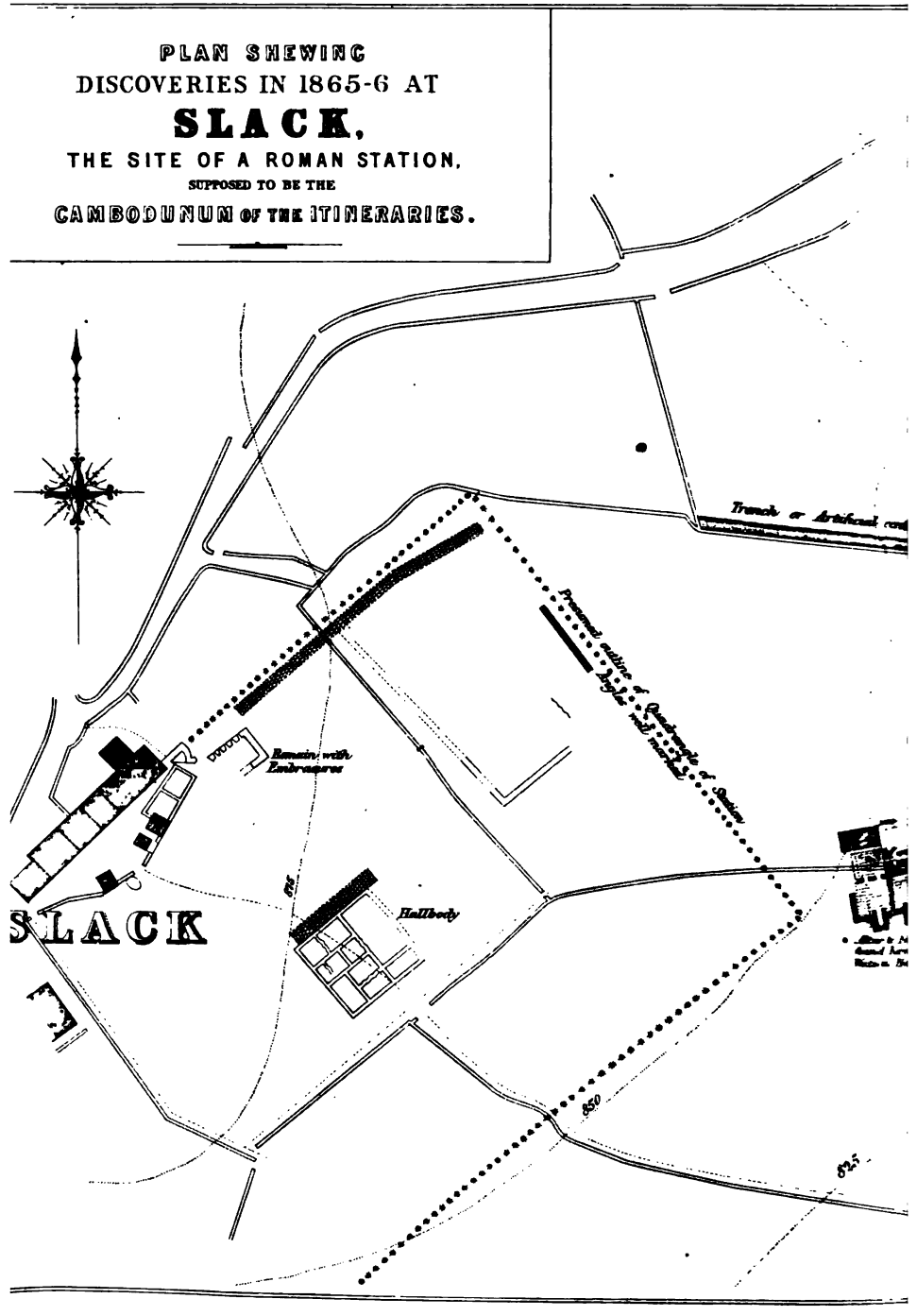
Submitted to the General Meeting, in London, on June 19, 1867; unanimously approved and passed.

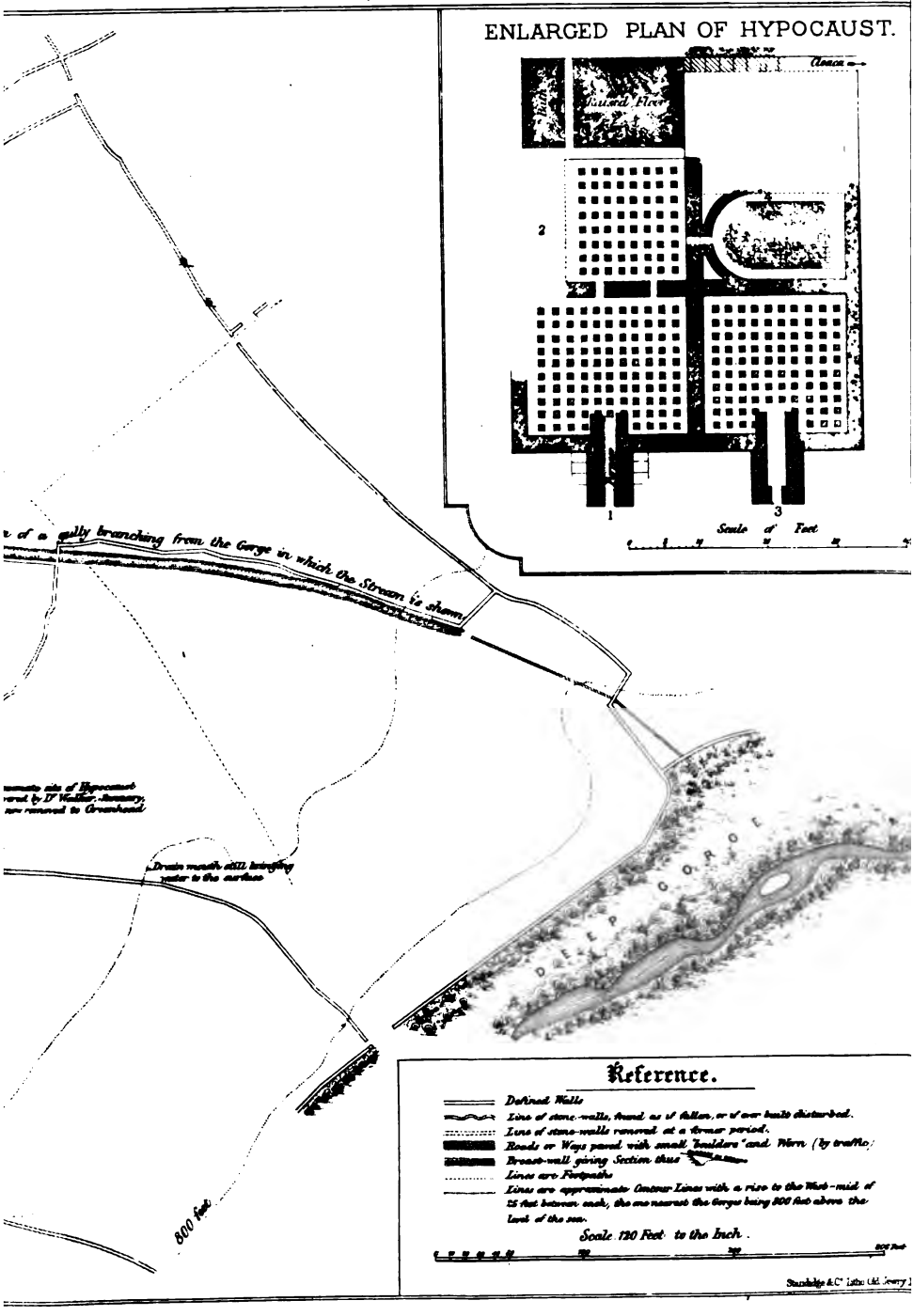
(Signed) TALBOT DE MALAHIDE, *Chairman.*

PLAN SHEWING
DISCOVERIES IN 1865-6 AT

SLACK,

THE SITE OF A ROMAN STATION,
SUPPOSED TO BE THE
CAMBODUNUM OF THE ITINERARIES.




ENLARGED PLAN OF HYPOCAUST.
Cloaca
Tepid
Natural Floor
2
1
3
Scale of Feet
of a gully branching from the Gorge in which the Stream is shown.
Drain made still bringing water to the surface
DEEP GORGE
800 feet
Reference.
Defined Walls
Line of stone-walls, found as it fallen, or if ever built disturbed.
Line of stone-walls removed at a former period.
Roads or Ways paved with small Boulders and Worn (by traffic)
Breast-wall giving Section thus
Lines are Footpaths
Lines are approximate Contour Lines with a rise to the West-mid of 25 feet between each, the one nearest the Gorge being 800 feet above the Level of the sea.
Scale 120 Feet to the Inch.
Standidge & Co. Lithe Ld. Jersey

The Archaeological Journal.

DECEMBER, 1867.

ON THE ROMAN STATION AT SLACK.[1]

By FAIRLESS BARBER, Hon. Sec. to the Huddersfield Archæological and Topographical Association.

THE Roman station at Slack, in Longwood, in the parish of Huddersfield, is believed to be the Cambodunum of the Itineraries, but the degree of certainty now existing on the subject has not been attained without much controversy, in which the eminent antiquaries, Camden, Burton, Gale, Horsley, Watson, Whitaker the historian of Manchester, Whitaker the historian of Leeds, and more recently, the late Rev. Joseph Hunter, have taken part. In their several works are to be found exhaustive arguments on the data before them, and the memoir "On the site of Cambodunum," by the Rev. Joseph Hunter, in the 32nd vol. of the Archæologia, supplies a summary of the different opinions that had been held up to the year 1846.

In this memoir Mr. Hunter arrives at the conclusion that the claim of Slack must henceforth be abandoned, and that it is at Greteland that we ought hereafter to fix the site of the long-lost station. It is the purpose of this paper to supply data rather than arguments, but it is proper here to remark that Mr. Hunter's conclusion is arrived at on a very bare balance of probabilities, in which his own opinion as to the suitability of the Greteland site is allowed to turn the scale in its favour, while he omits to consider that the remains at Slack are far greater and more extensive, and moreover situated on a Roman road in the required direction, of which clear traces still exist in the immediate vicinity. It may also be stated, that Mr. Hunter observes, "that all idea of actually tracing this Iter by *indicia* of it still remaining is vain." This may be true, speaking of the

[1] Communicated to the Section of Antiquities, at the Annual Meeting of the Institute, held at Kingston-upon-Hull July, 1867.

Iter as a whole, but if we once admit that as civilization progressed a Roman road would be likely to form, as this still does in parts, an artificial local boundary, we have a clue to the probable line which may be worth following.

At Slack itself, the Roman road is still the boundary between the important parishes of Halifax and Huddersfield, and the occurrence of Maplin Cross, a boundary cross, (probably more ancient than any parochial divisions,) close to the line of the road, where its site is still marked by a short stone pillar, placed there for the purpose, suggests that ancient crosses may be found at other points in the true direction. Thus, at Rastrick, from three to four miles east, we find another ancient cross, and on the hill-side, sufficiently near it, are traces of a road in the cultivated ground, still distinctly visible, and always spoken of by the inhabitants as the "old road." About two miles further east, over a ford still existing across the river Calder, in the line of this "old road," we have another ancient cross, called Walton Cross, on the boundary between Dewsbury and Birstal, and, about a mile to the east again, is Cleckheaton, where a Roman camp formerly existed; while at Beeston, close to Leeds, is a place called Cross Flatts. It is said also that other crosses, or indications of crosses, occur in the interval. In this way, we may infer that the road took a direct course to Leeds, where indications of Roman occupation exist to a greater extent than is generally supposed, and where by some the Legeolium of Antonine's Itinerary is placed, instead of at Castleford.

Certain it is, that the line thus indicated is the most direct that could be taken to Tadcaster, and that though all the crosses mentioned are not now, like Maplin Cross and Walton Cross, on actual boundaries, they are all very ancient; Rastrick Cross and Walton Cross, at any rate, being as ancient as the existing early remains at Dewsbury, attributed to the Saxons. Unfortunately only the bases remain, but these are massive, and richly sculptured with foliated and interlacing patterns.

This method of arriving at the probable direction of this Iter may be fallacious; but many other arguments might be urged in favour of the line thus indicated, at any rate between Slack and Leeds, and the idea is suggested as one worth following, though for the purposes of this memoir it is

unnecessary, even if time would permit, to pursue it further.[1] Enough has been said to shew that the position of Slack possesses antiquarian features of more than ordinary interest; and though the recent excavations there have not yet added much to what Watson and Whitaker have already described, they have at any rate reopened and exhibited in considerable detail to the present generation the indications which Watson and Whitaker examined under less advantageous conditions.

The plan (see map) is reduced from an accurate survey, on a scale of 30 feet to the inch, of the traces recently brought to light; but it shews the eastern portion only of the area over which the remains are believed to extend.

The enclosure near the farm house is called the Croft, and the indications shewn there no doubt represent the remains referred to by Watson as "The Hall Body." The three other fields to the east of the croft are "The Eald Fields," and it was at the intersection of the three fences of these that the altar to Fortune, mentioned by Watson, was discovered, which it is only reasonable to suppose was originally in some manner connected with the building there shewn.

This building will be better understood by a reference to the larger plan and section (see map), and to it might properly be added another hypocaust, further to the east, found in January, 1824, removed at the instance of Dr. Walker, an eminent local antiquary, and re-erected in the grounds of B. H. Allen, Esq., Green Head, Huddersfield, where Joseph Beaumont, Esq., the present occupier, most kindly permits its inspection by the curious.

It will be seen that these remains exhibit the ordinary arrangement of a Roman hypocaust. The south-west room was that first opened, and here in one corner a small portion

[1] The argument from the ancient crosses is not intended to do more than support the antiquity of the roads on the line indicated, and may be thus summarised:—Whatever the object of the crosses, they would be placed where readily accessible (all that have been mentioned are near cross roads), and when they are met with at such short intervals, it is reasonable to assume that one of the roads leading to them would follow a continuous course, and connect cross with cross, and however ancient the crosses, more ancient still would be the road thus continuously connecting them.

Mr. F. A. Leyland, of Halifax, who has paid great attention to this subject, has arrived at the same conclusion as the writer, for reasons stated in a paper read in 1861, at the 57th meeting of the W. Riding Geological and Polytechnic Association.

of the floor remained perfect, shewing the arrangement of pillars of small square tiles, bearing a larger tile as a cap, and then a larger slab nearly 2 feet square : a series of such slabs covered the area and supported a thick layer of strong concrete, large masses of which, broken in, were presumed to have been disturbed by Mr. Whitaker in the researches recorded in his History of Manchester. In the next chamber opened (No. 2) none of the concrete remained *in situ*, but traces of the pillars, nearly all of which were of stone rudely squared, were found. This chamber had been heated from No. 1 through two arches, the sides and springers of which are still in position. Immediately to the north of No. 2 a concrete floor was met with, raised on debris to the level of the upper floor of the hypocausts ; and in the north-east corner of the building, level with the lower floor of the hypocausts, was a slab of concrete, with a lip all around, shewing that there had once been raised sides round it. This slab was quite perfect, and bore traces of having been worn with water : its dimensions are 13 ft. by 6 ft. The removal at a previous time of the stones composing the surrounding walls had destroyed the sides ; but there can be no doubt that this slab was once the bottom of a bath, which, when complete, must have been an interesting specimen of Roman work. When water was poured on to it, by buckets full, it followed the lines worn by use in the surface, and found its way at once to the N.E. corner into a drain, the existence of which was not previously suspected.

The hypocaust in No. 3 is similar in all respects to No. 1, but heated independently. No. 4, on the other hand, has been heated from No. 2, and bears traces of alteration, which may be noticed in detail.

The original floor is of concrete, on a level with the lower floor of the hypocausts. Upon this, at a period subsequent to the original erection of the building, has been deposited a layer of rubbish about a foot in thickness, and on this another floor, composed of red tiles, has been laid, and on this again has been raised a shallow hypocaust with shorter pillars, some of stone and some of tile, bearing a floor level with the upper floor of the rest of the building. To the north of No. 4 there appears to have been a small open yard, under which the drain above referred to ran. The covers of it are still in position, and one of them is pierced

with four holes, like a modern dish stone, to receive any surface water from the area.

It was hoped that the debris on which the concrete floor near the bath is raised, and the rubbish under the tile floor in No. 4, would yield some coin or other remain that might indicate the date to be assigned to their deposition, and on a more complete examination they may possibly do so. In the debris under the concrete have been found several pieces of wall stucco, made of fine lime, with small particles of brick and brick-dust mixed with it. In some cases layers can be detected, and in all a fine smooth surface has been obtained by rubbing; so that it is clear there had been a permanent and somewhat finished structure either stripped or destroyed which supplied the debris. The tiles also forming the middle floor of No. 4, though flat on the surface, are found on the underside to have had flanges, as roof tiles, which have been broken away, either by design or accident, before they were laid on their present bed.

The other indications in the survey are either paved roads or foundations of walls, one of which is battered at a considerable angle, and appears to have had a trench outside it. This is in a direct line from N.W. to S.E., and forms part of one side of an oblong about 320 ft. by 450 ft., the angles and lines of which are clearly discernible in the present surface of the land.

A singular remain close to the farm-house requires special notice. Supposing the oblong above mentioned to be the original camp, this remain would be near the centre of the north side of it, the one nearest to the Iter, and its position is thus associated with the probable entrance to the station. The shape of this remain is rectangular, with embrasures at regular intervals of 4 ft. 6 in. in the external wall. These embrasures are about 6 in. wide on the outside, and rather more than 2 ft. within. They commence level with the original groundline externally, and with the floor of the building on the inside; about 2 ft. in height of the walls remain, and there is nothing to show that the embrasures may not have been considerably higher. Seven have already been opened, and as excavations are continued further westward, more may be found. No explanation of the object of these openings has been suggested, and it was at first thought that they might form part of a structure much later

in date than the station, but on a close examination the walls were found to rest on the original surface, where fragments of Roman tiles and bricks in large quantities still remained as they had fallen.

In construction all the walls are very rude, being built of undressed stones laid for the most part in tempered clay, and even the battered wall, where workmanship was necessary in order to get the chamfered edge in the different courses of stone forming the slope, is of the rudest kind. The bricks and tiles on the other hand are excellent, and have been made with great care and skill. They exhibit all the varied forms that would be used in the flues, pillars, and floors of the hypocausts and for roofing purposes, and on several fragments and some whole roof tiles, is found the now well-known impression COH. IIII. BRE., which has been the subject of almost as much controversy as the site of Cambodunum itself—but of this more hereafter.

On the supposed site of the station itself no human remains that can be referred to the Roman period have been found, but about 400 yards to the N.E., near the line of the Iter, and about 2 ft. below the present surface, a sepulchre was discovered in 1866, which is of such an interesting character as to merit a detailed description.

As originally erected, it would present to the eye a large rectangular block of rough walling, 10 ft. long, 5 ft. wide, and 2 ft. 6 in. high. On removing the stones from the upper surface, this block was found to contain a rectangular cavity about 6 ft. long by 1 ft. 6 in. wide. In this were arranged nine roofing tiles, each measuring 21 in. × 16 in., in the following order:—three on each side leaning against each other, so as to form in the section an equilateral triangle with the ground for its base, two vertically at the east end, and one at the west. The flanges of the tiles were placed uppermost; along the ridge and over each joint were ridge-tiles, 1 ft. 6 in. long, with a span of 7 in. at one end and 5 in. at the other. Each flat roof-tile bears on its external surface the stamp COH. IIII BRE. A similar tomb of tiles stamped LEG. IX. HISP. found near York, 1768, is figured, Archæologia, vol. ii. pl. xi.; also in Wellbeloved's Eburacum, pl. xi., with a like tomb found at York, 1833, and now in the Museum there. In the angles of the cavity above the tiles was coarse sand, on which the

stones forming the upper surface rested, and beneath the tiles lay the contents of the sepulchre.

These are all preserved, and present fragments of glass (possibly unguentaries) and of an earthenware cinerary urn of the pale colour of an ordinary fire-brick, lumps of charcoal, with a heterogeneous mass of decayed matter containing calcined bones, and a large number of nails of the same type as the ordinary wrought-iron nails of the present day. Some of these had been present in the charcoal during the cremation, or had been in wood subsequently burnt, and the outside of them thus carbonised had been preserved as a shell, while the rest of the nail had oxydised and corroded away.[2] There were no indications that cremation had taken place on the spot, and the broken condition of the contents has probably been the result of their collection and removal to the place of interment.

Now that a veritable tomb has been found *in situ*, it is hoped that further researches will disclose others, and that some monumental inscriptions may turn up which will settle conclusively, not only the name and approximate date of the station itself, but the true interpretation of the letters BRE so intimately connected with it. These have, since the time of Camden, been a puzzle to antiquaries. They have been read as signifying Bretannorum, Bretonum, Bremenensium, Bremetacensium, Brennorum, and Breucorum.

The last reading is supported by a correspondent of Notes and Queries,[3] subscribing himself "Queen's Gardens;" and more recently the Rev. Thomas James, F.S.A., of Nether Thong, near Huddersfield, has advanced the following negative and affirmative reasons for preferring Breucorum to Brennorum, which may be considered as the interpretation second to it in point of probability. "On the negative side," he observes, "that no cohorts of the Brenni, who inhabited a portion of the ancient Illyricum now forming part of Bavaria, are known to have been enlisted by their Roman conquerors. The name Brenni does not occur in the lists

[2] The process of case-hardening iron, by bringing it, when in a state of gradually increasing heat, into contact with crushed bones, hoof-parings, or other animal matter, so as to introduce carbon into the open pores of the metal, is well known and commonly used at the present day: it suggests the idea that the process here has been analogous, though accidental, and that the bones and other matter of the body that would give off carbon when burnt, have contributed to the case-hardening of the nails.

[3] N. & Q., 3rd series, vol. ix. p. 225.

of Roman legions and cohorts which have been preserved, nor can it be found in any ancient military inscription extant. A collection of the abbreviated Latin sentences which were more frequently to be met with on ancient stones, and marble monuments, and in books, was made by Sertorius Ursatus, a learned professor at Patavia, in Italy, who flourished about the middle of the seventeenth century. It was published in a volume in Paris in the year 1723, and contains upwards of five thousand different inscriptions, with the explanation in full of each added. In this collection there is no cohort of the Brenni mentioned. But, on the affirmative side, the abbreviated titles of three separate cohorts of the Breuci are inserted. The title of the first is COH. III. BREUC. The title of the second is the same as that on the tiles dug up at Slack, namely, COH. IIII. BRE.; and the title of the third is COH. VII. BREU. It is worthy of notice that the last term in these three examples varies in its abbreviated form, from which it may be inferred that each cohort had a recognised rule of its own for the manner in which it inscribed its designation. The Breuci, of which nation it is maintained that the cohors quarta, equally with the cohors tertia and the cohors septima, above specified, consisted, were of Celtic origin, and inhabited the ancient Pannonia, which is represented by the modern Hungary. They were conquered by the Romans in the reign of Tiberius Cæsar, and being naturally of a warlike disposition, and trained for military service, numbers of their youths were soon draughted away from their own country, to swell the imperial legions in other parts."

In coins and other objects the recent excavations have been singularly barren, when it is remembered that the increased height of the present surface over the original level of the station leaves a layer varying from one to three and even four feet in thickness, in which any objects left on its abandonment might be preserved. Of coins only twelve have been found that can be identified. These run from Vespasian to Trajan, and comprise one Judæa capta. A plain bronze fibula, a small bronze loop with rivets in it, two small hemispheres of white marble, and a bronze enameled ornament (figured at the close of this memoir) are all that demand notice.

Fragments of coarse pottery and of leaden pipes have

been met with, and a large quantity of galena, but this, from its position in a wall of the hypocaust, may have been deposited at a comparatively recent period.

The results above detailed, though meagre when compared with those obtained elsewhere, are not without a direct bearing on the early history of Yorkshire; and this bearing is greatly enhanced when they come to be considered in connection with surrounding remains, and illustrated by an examination of the local etymology.

This at once supplies us with no inconsiderable addition to the arguments in favor of Slack as the site of Cambodunum; for not only does the position satisfy the meaning of the word, "a fortress on or near to a crooked hill," as Mr. Watson and others have observed, but the echo of the name itself may be still detected in the name of an adjoining township, Scammonden, which, on early rolls of the manor of Wakefield, is, as the late deputy steward, Mr. Lumb, has stated, found written "Scamoden." It has also been suggested that Gosport, a place immediately to the north of Slack, is "*Cohortis porta*," a derivation which its position seems to justify, though the British prefix gos, little, and the British etymon of our word "porch," might equally explain it.

The word Cambodunum is itself Celtic, and it occurs not only here, among the Celtic Brigantes, but also among the Celtic inhabitants of Noricum, in the Rhœtian Alps, and, singularly enough, not far from a Brigantian lake. This circumstance has given rise to an ingenious suggestion, that the cohort here quartered were Breuci, and named this station after the Rhœtian Cambodunum, from the neighbourhood of which they had sprung. But is it not more natural to infer that our Celtic Brigantes, whose extensive occupation of the district is still testified by Celtic names on every side, had here, on their southern frontier, a stronghold named by them Cambodun, for the same reasons that had influenced their Celtic brethren in giving the same name to their town. It may, moreover, and with reason, be maintained, not only that the Brigantes held the forests and hills here in great strength, but further, that it was here that that warlike tribe, after maintaining a doubtful contest with Petilius Cerealis, were met and ultimately subdued by some of Agricola's forces; and that this was one of the chain of posts

which Tacitus informs us were established by that general along the frontier of the several districts which had submitted, with so much care and judgment, that no part of the country, even where Roman arms had never penetrated, could think itself secure from the vigor of the Conqueror.[4]

As he formed at Mancun (as we may call it) and Caer Ebrauc, Celtic towns, which became Mancunium and Eboracum, so here he would find Cambodun and make it Cambodunum.

And if to him we ascribe the first Roman occupation of the site, there are reasons, both negative and affirmative, why the alterations made in it should be considered the work of the Sixth Legion, which came over with Hadrian. It is stated that the fourth cohort of the Breuci were at this time part of that legion. Their name does not occur on the tiles in the broken flanges forming the middle floor of the hypocaust No. 4, but does occur in profusion on the tiles found on the surface.

That part of the sixth legion was here at a period subsequent to the alteration, is also certain, from the altar to Fortune, which bears the inscription which may be thus read *in extenso*, "Fortunæ sacrum Caius Antonius Modestus centurio legionis sextæ victricis piæ fidelis votum solvit lubens merito." This altar, which has a focus, and a step at the base as if to kneel on, was found immediately over it near the apsidal end of No. 4. What more likely than that the Centurion Modestus, finding the quarters of his predecessor unsuitable, should alter them, and mark the commencement of his occupation by an appropriate dedication to the goddess who had favoured him?

The limits of this memoir preclude further remarks; a volume might be written on the points of interest above alluded to.

It is hoped, however, that enough has been said to keep alive the interest felt by archæologists in the matter, and to record, though somewhat scantily, the results that have attended the labours of the Huddersfield Archæological Association, under the direction of whose late secretary, the Rev. George Lloyd, F.S.A., the funds subscribed for the Slack explorations have been for the most part ex-

[4] Tac. Agricola, c. 20.

pended; and who have collected, and preserved in a dwelling-house at Outlane, close to Slack, all the objects of interest discovered.

NOTE ON AN ENAMELED ORNAMENT FOUND AT SLACK.

THE most interesting of the minor relics brought to light during the excavations in the "Eald Fields," commenced in 1865, is a little relic of bronze enameled, of which mention has been made in a previous page, and which presents considerable elegance

Roman Ornament of bronze enameled, found at Slack. Original size.

in decoration, and the rich, strongly contrasted colouring, that mostly characterizes enamels of the Roman period. The central circlet is of smalt blue, surrounded by a circle of light vermilion; the foliated cruciform ornament within a lozenge-shaped compartment is of the same rich blue; the four surrounding spaces, extending to the margin of the circular head of this pretty little ornament, are filled in with bright red, as before. It is difficult to define precisely the purpose of this object; it has, however, doubtless served as an appliance of dress or of harness, and seems formed for attachment to a riband or a strap. Relics of the same fashion have occurred on Roman sites in England, and examples of enameled work, chiefly on *fibulæ*, are not uncommon. Amongst many beautiful specimens may be mentioned a little mounted warrior, from Kirkby Thore (Archæologia, vol. xxx. p. 284); a horse, from Painswick (Arch. Journ., vol. xii. p. 279); a *pelta*-shaped fibula, from Leicester (*Ibid*, vol. xxii. p. 69). The process of art in all is technically termed *champ levé*, the fused vitreous colours being affixed to the bronze in portions of the field that have been removed or chased out. The most precious relic of this beautiful art in Roman times is the cup found at a villa at Rudge, Wilts, and inscribed with the names of stations in Northumberland, *per lineam valli*. It is now preserved at Alnwick Castle. There are several beautiful enameled ornaments in the museums at York, Newcastle-on-Tyne, and Caerleon.

A. W.

THE BLACAS GEMS.

By C. W. KING, M.A.

PART III.—FIGURES AND GROUPS.[1]

THE figures and groups that struck me as most worthy of notice may be estimated from the following scanty gleanings taken almost at random out of so large a number, where scarcely one does not possess a special interest of its own.

Amethyst, about half-an-inch long, cut with four equal sides, perforated through the axis and traversed by a gold wire with a loop, showing that the gem served for a pendant. On each face a good Greek hand has engraved a Bacchante, each in a different attitude of frenzied inspiration, in allusion to the supposed protective influence of the gem against the power of wine, whence the name "amethyst" was derived.

Silenus, with the infant Bacchus seated on his one knee, whom he is contemplating with the most affectionate interest. The little god smiles lovingly back upon his foster-father, holding in one hand a huge bunch of grapes, in the other his thyrsus. The drawing of the old Faun strongly reminds us of the somewhat analogous type upon the coins of Naxos. It would hardly be possible to find a grander example of the Early Sicilian style than is afforded by this work. Large square sard of bright yellow tint.

*Bacchante falling backwards, as if sinking under the influence of her god, and vainly supporting herself by placing her hand upon a tall amphora, of extremely graceful shape. The work is wonderful, for both design and finish, and as precious a monument of the mature Greek manner as the last-quoted intaglio is of the early. It is almost equally remarkable for the uncommon beauty of the material, a sard closely imitating the darker jacinth.

[1] Continued from page 221, *ante*.

Young Faun, standing and lifting his cup on high, as if about to make a libation; a large vase is set before him. A pretty engraving, but much more to be noticed for the material, that rare variety of the plasma, Pliny's *Jaspis monogrammos*, exactly "like the emerald, but traversed by an opaque white band through the middle." It was highly valued in all the East as an amulet, and declared by the Magi to be especially serviceable to orators.

Silenus, ready to fall off his donkey, balancing his thyrsus on his shoulder, with his wreath put on the end of the staff for the sake of equilibrium, is a masterly rendering of the idea of the drunken demi-god, by a skilful Greek hand. Sard.

The Indian Bacchus seated, with a Faun standing at his side: to him old Silenus, kneeling, proffers a huge bowl of wine. The drawing of the group is extremely good, and it is engraved with extraordinary skill; but the very pictorial arrangement of the figures, coupled with the Etruscan border utterly inconsistent with the freedom of the style, inspires a strong suspicion of a modern origin. Sard of large size.

Maiden with a pitcher in her hand, standing in a pensive attitude before a sepulchral cippus, as if bringing thither libations to the *manes* of a parent. If therefore the subject demands an appellation, we may see in it Electra at the tomb of Agamemnon. The Ὑδρόφορος, "Girl with Pitcher," was a popular subject at Athens: the figure was a regular decoration upon the tombs of girls who had died before marriage. Themistocles, when surveyor of the aqueducts, had one made in bronze out of the fines paid by offenders against his jurisdiction, which the Persians carried off from the sack of Athens to Sardis, where he recognised it during his exile. The pure style of this work warrants its assignment to the times of Phidias; gems referable to that period with certainty, are, as K. O. Müller justly remarks, very rarely to be met with. Pale sard.

Esculapius, leaning on his club, a vigorous work in the later Roman manner, is made precious by the unparalleled beauty of the stone, a jacinth-like sard. A bust of the same god, showing the shoulders, and contemplating his staff, is to be noticed as a *Greek* work. Sard.

The "Pyrrhus" of the catalogue is nothing more than

a Mars Ultor of mediocre Roman work, but in a very fine sard.

Mercury, weighing a soul in his balance, is beyond all question a copy of the once celebrated Hamilton scarabæus, itself a modern imitation of the well-known Etruscan mirror-picture. Sardonyx of remarkably rich colours.

Lion seen in front, standing on his fore-paws, with body erect in the air, as if just alighting from a bound: a singular example of foreshortening, and very successfully carried out. Nicolo.

Diomede seated, grasping the Palladium, a Roman engraving of the better class, but infinitely more interesting for the quality of the stone itself, a pure deep green plasma, easily to be mistaken for a deep coloured emerald.

"Hercules Musarum," the hero seated on a rock and playing on the lyre: bold Roman work, on a large dark amethyst, one of the very finest intagli to be met with in this stone.

Hunter about to spear a monstrous wild-boar ensconced within a reedy thicket; like Horace's Hebrus—

"Celer alto latitantem fruticeto excipere aprum."

A curious subject, but done in a mediocre Roman style. Sard.

Lyre, formed by two Cupids supporting an oviform vase, from which the strings proceed. Very curious, from its unmistakably being a clumsy adaptation of the unique representation of the Clepsydra of the Circus Maximus,[2] made by a modern artist who totally misunderstood the meaning of his prototype. Visconti consequently describes it as the shield of Minerva, borne up by two genii, so making a lyre. Banded agate, like the original.

Achilles disarmed, standing amongst the pieces of his panoply, which lie scattered on the ground about him. Done in a strangely loose, flowing manner upon a very large nicolo, but of poor quality, apparently the occidental.

Two heroes in conversation; drawn in a fine manner, that indicates the best Greek period, which makes the intaglio doubly curious, its material being a remarkably clear plasma.

[2] Figured in Arch. Journ. vol. xxi. p. 138.

Phorbas, son of Apollo, who, having delivered Rhodes from a plague of serpents, was therefore immortalized as the constellation Ophiuchus. He on the same account is figured here as a youth moving forwards begirt with an immense serpent, studded with his stars arranged in their proper order in the heavens. Engraved with a delicate touch and careful finish, making it one of the finest astrological gems that have come under my observation. Sap-green jasper.

Hercules bearing off the Cretan bull; a beautiful Greek work of the best period. Sard.

The same favourite subject repeated in the early Roman style. Sard.

Omphale clad in the spoils of Hercules, engraved with much spirit. Banded agate, partially calcined.

The horses of Diomedes seen in front face: a curious *tour de force* of the Roman engraver. Sard.

Hercules leading away a pair of these same anthropophagous steeds. Early Roman work. Sard.

Satyr surprising a sleeping nymph (Jupiter and Antiope): a good Roman work, but invaluable on the score of the material, a true *emerald* of the best quality.

Ceres seated in a *thensa* (sacred chariot), adorned with a frieze of figures, drawn by two elephants,[3] each mounted by his *mahout*. This design, which is executed in the best Roman style, is the original of the numerous copies everywhere to be met with; one of the most exact in sardonyx being admitted amongst the Castellani gems. Sard, entirely calcined and opaque.

Phre, the hawk-headed sun-god, standing wrapped in a toga, and holding an Egyptian sceptre: a valuable and rare specimen of the Roman-Egyptian style. Pale amethyst.

Cupid driving a goat; inscribed ΠΡΙΒΑΤΑ, *Privata*, the name of some Roman lady who owned the signet in the second century. Sard.

Two Cupids wrestling in front of a terminal figure of Hermes, the patron of the palæstra;[4] the pædotribes (trainer) standing by and directing their exercise. Later Roman style. Sard.

[3] This same type appears on certain medals of deified Augustæ, where the legend "AETERNITAS" declares it to have symbolized perpetuity of fame.

[4] Qui feros cultus hominum recentum
Voce formasti catus, et *decoræ*
More *palæstræ*.

Mars, fully armed, descending from the skies upon the sleeping Ilia. Engraved in the most finished Roman manner upon a very beautiful plasma.

Prometheus constructing the skeleton of man: this very curious subject is engraved in a poor, sketchy manner, but has all the appearance of a genuine production of latish Roman art. Sard.

Victory advancing, her figure occupying the top layer of a large and richly-coloured sardonyx. Another Victory, combining the character of Hygiea, for she holds and feeds her serpent in the regular attitude of that goddess. The manner of this latter is extremely grand. Sard.

The giant Gyges, serpent-legged, wrestling with the gryphon, under which form Apollo engaged him in the famous War of the Giants. The present is a clever modern copy of the well-known Townley gem. Sard.

Mithraic sacramental table, supporting the holy things, and flanked by two erect flambeaux entwined with crested serpents, guardians of the mysteries. An exceptionally well-engraved example of the talismanic class. Sardoine.

Sleeping nymph, two goats pasturing in the field above: (the constellation Hædi ?) a curious instance of an ancient attempt at perspective in this branch of art. Sard.

Cupid holding the Psyche butterfly over the flame of an altar: the work belongs to a better and more early period than the usual run of these sentimental subjects. Sard.

Agave, in flowing robes, taken from an admirable original. Antique paste of a brilliant pale green, and evidently that imitation of the *Callaina*, peridot, mentioned by Pliny as the most successful of all the counterfeit precious stones. A second paste of the same description may be noticed in this collection.

Apollo standing and resting his lyre upon the head of a small female figure, which holds forth a branch of the Delphic *fagus*. This attendant has been variously explained as a choral virgin, or Themis, the primal guardian of Delphi; the former explanation being the most plausible. Of this group many antique *repliche* are in existence. A fine jacinth, very convex.

Little boy, holding before him a monstrous mask of a giant's head, entirely covering himself, with which he scares

two of his playmates, one of whom tumbles backwards in his fright whilst the other makes his escape. At the back is a statuette of Pallas on a cippus under a tree; upon the ground a large wine-cooler. This pretty work is undoubtedly of the Cinque-cento period, as is apparent, not merely from the peculiar cutting of the intaglio, but from the infant actors being wingless, and therefore representing mortal children, not Cupids; from the mask having no recognisable scenic character of its own; and lastly, the ground is represented in a naturalistic manner, not by a plain line, as is the invariable rule in ancient pictures. Black agate.

Ajax extending his broad shield over the wounded Teucer is a very mediocre Italo-Greek work, which makes the honour formerly done to it the more unaccountable. It bears engraved on the back the German imperial shield, having been used for his private signet by Joseph II., who afterwards presented it, as something of great value, to his physician, Dr. Barth. Banded agate.

The same subject, but done in a far superior style, and that had not been unworthy of the dignity assigned to the foregoing gem, is placed by its side in the case.

Boxer, "squaring his arms," and advancing to the combat, can be no other than Pollux, the patron of pugilists. A fine intaglio on a very contracted field, which has been skilfully inserted into a larger sard in order to give the design the fitting area.

Pig, walking, displaying all the points Farmer Bull still admires in a prize specimen of its kind, is a wonderful proof of Greek skill in drawing animals. Sard of large size.

Boy with his bat about to knock off a ball placed on a stump set in the ground: a memento of some forgotten game amongst the school-boys of Rome. Sard. Another relic of the same kind is the lovely little gem, a boy trundling his hoop (trochus) and bearing on his shoulder the palm tied with ribbons, the prize of victory in the race. Sard.

Pallas and Neptune disputing for the honour of giving a name to Athens. An exact repetition of the design of the far-famed cameo,[5] signed ΠΥ (Paris), but in a highly-

[5] There can be little doubt this preserves to us an exact copy of one of the most important pieces of marble sculpture in Greece, the central group of the

finished Greek manner, and offering every appearance of genuine antiquity. Sard.

Chimera, formed of a mask and other adjuncts united into the figure of a bird: engraved in a coarse but vigorous manner not common in this class. Sard, set in a gold ring of the simplest pattern, but of the most unwieldy weight.

Antique gold ring, the shank broken, set with a fine *cabochon* jacinth, engraved with a Victory, of fair Roman work.

The *Gnostic* stones in this cabinet, though few, are worth notice for the goodness of their execution, or for their uncommon magnitude and rare material. Amongst the latter particularly to be observed are :—

Isis holding out her sacred asp in the attitude of Hygiea, a crocodile beneath her feet: the field of the stone occupied with several large and complicated monograms, doubtless inclosing an invocation understood by the initiated, and communicated to the receiver of the gem—"a new name written that no man knoweth save he that receiveth the stone." Reverse, a gryphon resting his paw on a wheel, the usual symbol of the sun-god; the talisman thus uniting the ideas of the Isiac and the Mithraic creeds. Its composition displays an uncommon richness of symbolism, the gryphon's tail terminates in a serapis-head, his wheel squeezes out of the chrysalis a tiny human soul with outstetched hands, in front stands Thoth's ibis holding Libra, the horoscope of the *native* owning the gem.—A stone of which hardly a second *antique* example can be adduced, is an obsidian, polished like a mirror, engraved with Horas seated on the lotus, and the spell ΑΡϹЄΝΟΦΡΗ on the reverse. Green jasper (about $2\frac{1}{2}$ by 2 in.), set in a heavy gold swivel.

Assyrian and *Persian* art, whether early or late, are but poorly represented in this glyptic assembly. Of the former, the only thing worth attention is a fine calcedony cylinder, about 2 in. long, which, besides the design, has several vertical lines of unusually neat cuneiform letters. Of the latter class, are two scarabeoids in calcedony, one with a king on horseback hunting the lion; the other, a boar attacked by hounds, both of better execution than is usual with Sassanian intagli.

western pediment of the Parthenon. Its appearing on this early Greek gem (which belongs to the period of Phidias), and its selection for the subject of so grand a cameo, equally attest the importance of the original thus reproduced at widely separated epochs of the glyptic art.

The *Camei* are a part of the collection to which an enormous expenditure of money as well as of care has been devoted by its late owners, and that too with the happiest results.

First comes the most beautiful piece of all Roman portrait-work, the diademed *Head in profile, with the Ægis-covered bust, long known as that of Constantinus Junior, in consequence of having been first published under that title by Gori in the "Museum Florentinum." Yet the more sagacious Raspe declared at the time that both style and face belonged to Augustus, who appears here with the true Apollo type of countenance of which he was so proud in life. But Gori was misled by the *diadem* in gold, originally set with precious stones, an addition of Byzantine times, to make way for which the former laurel-wreath has been purposely obliterated, leaving, however, unmistakable traces of its previous existence. By this mean expedient the portrait was metamorphosed into one of a prince, whose own times were incapable of producing anything of merit in this line. The age of Constantine, to go no lower down, was well capable of so disingenuous an appropriation of the labours of a better period. Witness his Triumphal Arch, still decorated with bas-reliefs stolen from that of Trajan, its Parthian victories applied to commemorate the fall of Maxentius. The cameo, thus new-christened, was probably introduced into the ornamentation of a shrine intended for some cathedral enriched by the devotion of the new convent.[6] The little heads in emerald and plasma, now seen in the diadem, were inserted by Leone Strozzi to replace the original stones, lost before the cameo came into his possession. This cameo can, without dispute, be placed first amongst the numerous portraits of Augustus, possessing, as it does, in addition to wondrous elaborateness of detail and beauty of finish, unusual magnitude, being an oval of $5\frac{1}{2}$ in. by $4\frac{1}{2}$ in., in a sardonyx of three layers, of which colours a happy use has been made by the artist; the face being rendered in pearly white, kept in flat relief upon a light sard ground, the hair and the Ægis in different shades of drab

[6] Constantine by the advice of Pope Sylvester, on changing the seat of Empire, presented the churches of Rome with an incredible amount of the precious metals in the form of ecclesiastical plate, fonts, statues, &c., including crosses weighing 300 pounds of gold. (Anast. Bib.)

and brown. It is a curious fact that the cast of this cameo usually sold (from which Raspe's drawing was made) does not exhibit the Byzantine gold diadem, but only a plain bandeau; the former, it would seem, was omitted by the modeller in plaster, as being too evidently the interpolation of barbarism.

*Another profile head of the same Cæsar, but taken at a more advanced time of life, and on a scale about one-third of the preceding. This head is in very high relief, and the manner strikingly bold and full of expression. It is set for a pendant jewel in a Cinque-cento frame of enameled gold, wrought in a very elegant pattern.

*A third profile, of somewhat larger size, but wanting the neck, is executed with much higher finish, and in very flat relief, displaying more of the Greek than the Roman manner of treatment.

*A fourth, in front-face, and in high relief, on a still more extensive scale, is probably due to a skilful modern hand. The work reminds one of Pistrucci's or Girometti's best performances.

* Messalina, with hair dressed in short curls in the peculiar fashion by which all her portraits are recognised. A good likeness and expressive of character, although marked by the stiffness of the already declining art of her times. The part below the mouth is deficient, but has been skilfully restored in a sardonyx of the same kind, one of rather poor quality. The relief, in buff upon a white ground, has been kept very flat, as is most of the camei of Claudian date. Dimensions but slightly less than those of the great Augustus.

"Livia," as the finest female head amongst the camei is catalogued, exhibits neither the well-known profile of that empress, nor the Roman style of engraving. It may with good reason be removed to a much earlier school, and indeed seems strongly to resemble the medal-portraits of Berenice II., the head being also veiled and diademed. In flat relief, white upon black; size 1¼ in. by 1 in. It is set in a remarkable enameled frame, with small eyelet holes for affixing it to the wood; having been one of the seven camei decorating the cabinet of the Sala Grande, Venice, and *presented* (involuntarily) by the municipality to M. Lallemand, the French Commissary, in 1797.

Tiberius, a head in front face, with that of the infant Drusus by the side, is a curious turquoise paste taken from a large cameo of very great merit.

Galba, a magnificent head in high relief, has all the marks of the best period of the Cinque-cento. Nothing can exceed the spirit of the drawing except the skilfulness of the execution. Fine onyx of two layers, 2 in. by $1\frac{1}{2}$ in. in size. Its companion, about half that measurement, is an indubitable ancient work, and thus affords an excellent means of comparison between the two styles.

Diadumenian, a head executed with unusual breadth of manner, and

Carinus, a laureated head within a reserved rim, worked out in the peculiar, neat style of his *solidi*, are camei well deserving of notice, from the rarity of glyptic relics of so late a period.

The so-called "Licinius" is a bust in front-face and high relief, of agate onyx two inches high. The head is *laureated*, a distinction which, coupled with the close-shaven chin and long throat, combines to prove it *cannot* belong to the age or person of the thick-bearded, bull-necked Dacian, Constantine's colleague, but, on the contrary, to the days of the first Cæsars. Although the nose is gone, there is no difficulty in recognising in the face the well-known physiognomy of Claudius.

The same emperor in profile, of work unusually good for the artists he patronised. The face is in white, the hair is brown, the field dark: in a small sardonyx of the most vivid colours.

Jupiter and Antiope: a satyr guided by Cupid is rushing upon a sleeping nymph, whilst a young Faun attempts, mischievously, to hold him back from the prize: in the centre is a cippus supporting a statue of Bacchus. The work of the figures, which are in white upon a sard ground, is truly admirable, but the entire composition is in the taste of the Cinque-cento school, and belongs to the same class as the Marlborough "Marriage of Cupid and Psyche." The gem has been about three inches wide, but has lost one-third of its area.

* Medusa's Head, in $\frac{3}{4}$-face and half-relief, carved in a dark amethyst, $2\frac{1}{2}$ in. in diameter. Of all rilievi in single-coloured gems none that I have seen can compete with this

in grandeur of style, excellence of workmanship, and splendour of material. There can be little doubt its primary destination was to decorate the imperial cuirass, an idea first borrowed from the Ægis of Jupiter.

* Conjugated busts of a youthful king and queen. The family likeness to Apollo, conspicuous in the prince's features, declares that we see here one of the early Seleucidæ, lineal descendants of the god of day, not one of the hard-featured Ptolemies to whose memory the gem is commonly given The relief, flat, in white upon a sard field, is finished with astonishing delicacy, and with a manner as superior as it is dissimilar to that of the best camei of Roman times.

Drunken Faun dancing, brandishing his thyrsus, and with the skin of a deer thrown across his arm, an overturned vase lying on the ground, is a piece that has been repeatedly published, and fully equal to the reputation it has so long enjoyed. The relief is flat and in dark brown upon a white field : the style belongs to the Greek school.

* Lion pulling down a bull is executed in precisely the same style and material, and is one of the best pieces of antique animal-painting in stone anywhere to be met with.

Jupiter, a profile bust in high relief in agate-onyx, 2 in. high, has a coarse but bold style of its own, which induces me to refer it to a late Roman period.

Venus standing with Cupid in her arms, done in the boldest possible relief and in an agate-onyx, 3 in. high, has that peculiar air about it that marks the works of Girometti, the last of the modern Roman masters.

Centauress recumbent, suckling her infant foal, engraved after the Greek manner in a peculiar and flat relief, is a very interesting work, as there is the best reason to suppose it preserves to us a copy from the picture by Zeuxis of the same subject so minutely described by Lucian. ("Zeuxis," c. 6.) His account of that portion of the painting would serve literally for this cameo.

Medusa's Head, in $\frac{3}{4}$-face, is precisely of the type made famous by Da Vinci's early picture at Florence, the parent of such a swarm of cameo-copies, and probably to be referred to no earlier origin. Coarsely carved in almost full relief in a large and fine-coloured sardonyx, the back of which remains rough from the hammer.

The same head in front face, exquisitely carved by a

clever hand of the last century, out of one large and perfect Peruvian emerald. So beautiful a work has obtained a setting of equal merit in its way, being mounted with true Parisian taste in an *enchassure* of the most appropriate character that could be imagined. Numerous serpents in enameled gold continuously entwining produce a broad open-work frame, that marvellously augments the effect of the Gorgon in their midst. Thus becoming an unparagoned brooch, it had been presented by the late Duc de Blacas to his daughter, who was unfortunate enough to lose possession of the gift in consequence of its having remained in the cabinet at the time the gems were valued for sale. Under such circumstances both equity and politeness suggest its restitution to the lady.

Aged Faun seated and stroking the beard of his favourite goat, which returns his looks of affection with comic expressiveness. The work is vigorous, yet not without finish: relieved in white upon sard. It is set for a brooch in a modern *rococo* frame of execrable taste, that greatly mars the effect of the antique design.

Mask of the Indian Bacchus, in front face, a fine work, apparently of a good Greek age. It is, however, more noteworthy for the material, amongst the most rare in antique glyptics, a large, green *turquoise*.

Head of an old Faun, shown in front face, the beard hanging in long twisted curls, is the most spirited embodiment of that semi-divine, semi-bestial character, that has ever come under my notice. In very high relief, size $1\frac{1}{4}$ in. by 1 in.

Pegasus, the forequarters only, is a wonderfully delicate Greek relief in opaque white upon black; a miniature gem in every sense of the word.

Ariadne's head, ivy-crowned, is a very noble performance of the times of Hadrian; but the stone is discoloured by the action of fire.

Ganymede seated, feeding his eagle, is a miniature piece of extraordinary elaboration upon a sardonyx of great beauty.

Horse *passant*, in dark upon a white field, and within a curiously-designed reserved rim of the same colour, is, of itself, but a mediocre performance, but deserves notice on account of that embellishment.

Minerva, in a biga, is spirited in design, and to be ad-

mired for the ingenious employment of the different colours of the sardonyx, to give her a pair of black and white steeds.

But the same artistic adaptation of the capabilities of material to the requirements of the design, has nowhere been better exemplified than in the **Victory borne in a quadriga*, in which each of the four horses is made out in a perfectly distinct colour. The drawing, however, is very stiff, and savours of the decadence; indeed, it strongly reminds one of that in the *quadriga* of Centaurs upon a medallion of M. Aurelius. Sardonyx, about 3 in. wide.

Alexander, helmeted head, much undercut in the coarse style of the close of the Cinque-cento. It is, however, deserving of notice for the stone, a large irregularly-shaped sardonyx, hollowed internally, and seemingly the fragment of a magnificent antique vase in that costly substance.

Metastasio's ring, set with a small cameo of a lyre neatly relieved in black upon a white ground; apparently an antique. The ring itself is of a very elegant, open-work pattern in the Louis XV. taste.

A Bacchante holding two spears and a bunch of grapes, deserves the highest commendation for its careful finish.

Hermaphroditus, reclining on a lion's hide spread under a tree, before a terminal Priapus, is drawn with extreme grace and perfect finish. Relief, in pearly white upon black. (1 in. by $\frac{3}{4}$ in.)

Triton, winding his shell-trumpet, is a spirited work in the same manner and kind of onyx.

The same description applies to the small Nero, $\frac{3}{4}$ in. high: one of the best cameo-portraits of him that have ever come under my notice. These four camei belonged to the De la Turbie cabinet, and may be recognised by their setting,—a broad border of dead gold surrounded by another of blue enamel.

Victory triumphing in a quadriga, a piece of some pretensions from its magnitude (2 in. wide) and skilfully utilised strata, proves on examination to be an indifferent Cinque-cento work in high relief, much under-cut.

Mediæval ship with mast and crossyard, a sailor climbing the shrouds, carries for passengers two youthful *heads*, generally taken for portraits of the sons of Lorenzo de' Medici. But, considering that the ship is the very one borne in the arms of the city of Paris, it seems to me much more probable

that this cameo, retaining so much of the Gothic taste in its design, belongs to the early French school, and commemorates the sons of Henri II. Engraved in a peculiar flat style, like the cameo-portraits of our Henry VIII. A fine nicolo.

Diana, the full bust shown in front face, and in very high relief; on her brow is the crescent: the quiver at her back is added in intaglio. This is a masterpiece of Renaissance work, the treatment of the flesh is admirable, as is the transparent texture of the thin drapery covering the bosom without concealing its contour. As the face can easily be recognised for a portrait of Diana de Poitiers, the work must necessarily be due to Matteo del Nassaro, the court engraver under Henri II., of whose reputation its merit is fully worthy.[7] A fine agate onyx, about 2½ in. by 2 in. in size.

Ulysses, a fine bust by J. Pichler, whose well-known signature, ΠΙΧΛΕΡ, appears on the shoulder-strap.

Venus seizing Cupid by the arm, as if about to inflict upon him a maternal chastisement, is a remarkable instance of successful imitation of the antique mode of cutting camei, although the design sadly controverts its own pretensions, being quite in the Louis XV. style. A large sardonyx of great beauty: signed in the exergue AMASTINI, an engraver whose name I cannot discover elsewhere.

The Infant Saviour raised aloft in two large *hands* alone, is a singular caprice of some Cinque-cento artist, who has carried out his design with uncommon skill.

The *Modern Intagli* are numerous, and furnish excellent specimens of signed and unsigned works of the best masters in the art, from the date of its revival to its extinction.

No glyptic work of any age or country can surpass in historic and artistic interest the crystal plaque engraved with "Tityus and the Vulture," being the very one mentioned by Vasari as engraved by Giovanni dal Castel Bolognese, from a drawing made by M. Angelo,[8] for the Card. Ippolito de' Medici. This "Tizio a cui mangia un avoltoio il cuore," as the old Tuscan quaintly phrases it, is a naked youthful giant fastened down at full length and writhing

[7] This great artist, contrary to the custom of his rivals, never signed his works: none therefore can be positively assigned to him, although his genius was most prolific, Vasari stating that there was hardly a noble of the court who did not think himself obliged to wear something from his hand "round the neck or in the cap."

[8] With a companion "The Fall of Phaeton," the present locality of which I know not.

upon the earth, a posture the best fitted to display the anatomical skill of its illustrious designer: the intaglio is not polished internally. In the exergue is seen the abbreviated signature, IO.C.B. (Oval, $3 + 2\frac{1}{2}$ in full size).

Female seated before an altar, an attendant standing behind places a garland on her head, whilst another lifts a basket in the air; a design well known by Wedgwood's copies on a reduced scale. Highly interesting, as the genuine work of the celebrated Valerio Vicentino, whose signature, VA.F. appears in the exergue. This intaglio too is unpolished internally; and is an oval of the same size as the preceding. It is set for a pendant jewel in a gold frame, curiously enameled with lines of black.

Two other crystal plaques, somewhat smaller, but similarly mounted for pendants, are in a more finished style, being highly polished in the intaglio; and both evidently come from the same hand. The subjects are "Hercules strangling Antæus," and "Neptune in his Car," seen in front face; both, for composition and elaborate finish, *chef-d'œuvres* in this peculiar branch of engraving. It is more than probable that they are due to Matteo del Nassaro, who, as Vasari expressly states, executed many such crystal plaques during his residence at Paris. From that historian's high praise of these works, casts of which he had seen at Verona, Matteo's native place, it may be inferred that he considered them the best he knew of that description. I have already mentioned that Matteo, either from modesty, or more likely pride, expecting his works to speak sufficiently for him, never signed anything he did, whereas had these elaborate compositions been due to either Valerio, or Giovanni, they would undoubtedly have borne their signature. This fact, therefore, coupled with their superior merit, justifies us in regarding Matteo as their author.

Warrior sacrificing at an altar, with two attendants, one of whom holds the ox—the victim—must be intended for Æneas, from the Venus Anadyomene emblazoned on his shield. An excellent imitation of the antique. Sardoine.

To conclude,—modern art has never to my knowledge produced anything so truly charming, for the combined beauties of drawing, workmanship, and material, as the Head of Leander swimming. A very large emerald-like aqua-marine.

Helmet in the Museum of Artillery at Woolwich.
Date, the first half of the fourteenth century.

HELMET OF THE FOURTEENTH CENTURY, AND OTHER OBJECTS PRESERVED IN THE ROYAL ARTILLERY MUSEUM, WOOLWICH.

By BRIGADIER-GENERAL LEFROY, R.A., F.R.S.

THE annexed illustration represents a helmet recently procured for the Museum of Artillery, and exhibited at a meeting of the Archæological Institute in May, 1866. It bears a considerable resemblance to the fine example in the Parham collection, stated to have been formerly in the church of Hathersage, Derbyshire, where it was traditionally associated with the memory of "Little John," who is supposed to have been there buried.[1] This latter belongs undoubtedly to the first half of the fourteenth century.

In its present state this helmet in the Woolwich collection weighs 9 lbs. 9 oz. It is perfect as to form, and in pretty good preservation, but must have been considerably heavier. The body is composed of four plates of iron, riveted together in the form of a double cone; a fifth forms the crown, which is marked with a foliated cross, and provided with a pin or button for the attachment of a plume or mantling. The sixth forms the visor, which is hinged on the left side, and secured by a hook or staple on the right. The *ocularium* is of the usual character—a long narrow slit left between the two front plates, and which the top of the visor does not cover. The knight was supplied with air by means of about 150 small holes pierced through the centre of the visor in a group of chevrony arrangement. In a group figured in

[1] In the church-yard at Hathersage are two stones, which according to tradition mark the spot where the companion of Robin Hood was interred. The distance between these stones is 18 ft. 4 in. Pilkington, in his History of Derbyshire, states that a thigh-bone measuring 29½ in., was found in this grave; it lay at the depth of two yards. The excavation was made about the close of the last century, by some persons from Cannon Hall, near Barnsley, who carried off the gigantic bone together with "an ancient cap," which was suspended by a chain in the church, and traditionally reputed to have been worn by the bold forester. Further particulars are given in Mr. Hall's Rambles in the country surrounding the Forest of Sherwood. According to the old inhabitants of Hathersage, however, the cap, "which everybody knew to be Little John's," was of green cloth. Gutch, Geste of Robin Hood, pp. xv. 68.

Hewitt's Ancient Arms and Armour (vol. ii. No. 42) a very similar head-piece may be seen; an example is also to be found in the Museum of Artillery at Paris, in a tilting-helmet of the fifteenth century (Class H., No. 5). Mr. Hewitt remarks that it differs from the helm of the latter part of the thirteenth century in having the cleft for sight at the base of the crown defence, instead of forming part of the moveable door or face defence. The button at the apex, which he considers to be for the purpose of affixing the kerchief of pleasance, may be seen in the seals of the Earl of Lancaster, son of Crouchback, Robert Earl of Flanders, 1305, and others of the same period; its absence, however, from the majority of early helms seems to indicate that little pleasance was associated with their use.

The next example is a bassinet presented by Sir John Hay Drummond-Hay, H. B. M. Minister Resident at the Court of Morocco, to the same museum. It was obtained by that gentleman many years ago from a considerable deposit of ancient arms and armour existing at Tangier, as similar deposits have existed, down to our own times, in

Bassinet from the deposit of Armour at Tangier.
Presented to the Museum of Artillery at Woolwich by Sir John H. Drummond-Hay.

other neglected fortresses of the Ottoman empire, such as those at Rhodes and Cyprus. It belongs to the period of the expulsion of the Moors from Spain at the end of the fifteenth century, and although now in a decayed state, shows the skill of the artificer, being beaten from a single plate without riveting. It will be noticed that the crown

Iron Target from the deposit at Tangier, of arms and armour of the period of the Expulsion of the Moors from Spain.

Presented to the Museum of Artillery at Woolwich by Sir John Hay Drummond-Hay, K.C.B.

is marked with four bands bordered, and intersecting like the crosses of a union jack, a singular description of ornamentation for a Moslem helm.

The next illustration represents a target of the same period and provenance as the last. It is composed of two plates of iron riveted together in the middle, where their junction is covered by a narrow slip of the same metal, forked at either extremity. Two bars or bends of wavy outline cross the shield and meet in the form of a chevron in the centre, and there are two bosses, one of which retains a small ring, fashioned like a serpent. There are traces of gilding discernible, and small remains of velvet under the cross-bars. The edge of the shield is punctured all round with holes for the attachment of a covering.

To the guarantee which we have for the genuineness and precise period of these objects, from the conditions under which they were obtained by Sir John Drummond-Hay, may be added a remarkable confirmation, to which my attention was called by the Very Rev. Canon Rock. There is, he states, a well-known mural painting in the Cathedral of Granada, representing a combat between Moslem and Christian knights, in which the former, who are of course defeated, carry shields precisely resembling the one here engraved. Dr. Rock himself saw the Tangier hoard about the year 1837, and procured specimens from it, which he presented to the late Earl of Shrewsbury; they were in the collection at Alton Towers at the time of its dispersion.

I am indebted to Mr. Hewitt for the observation that similar forms occur likewise in the paintings of the Alhambra, as shown in the illustrations of that palace by Mr. Owen Jones. There is a shield of similar form in the Tower Armoury, formerly in the collection of the Baron de Peuker.

A target of somewhat similar fashion, heart-shaped, with a central ridge and two bosses, is figured by Hefner. It occurs on an altar sculpture of wood painted, that was to be seen at Hall in Suabia. This example, however, is pointed at its lower extremity, instead of being forked or bifid as on the Moorish targets that have been noticed. Hefner ascribes it to the second half of the fourteenth century.[2]

[2] Trachten des Christl. Mittelalters, IId. Division, pl. 34.

MAIL-MAKER OF THE FIFTEENTH CENTURY, FROM AN ILLUMINATION IN THE BRITISH MUSEUM.

By J. HEWITT.

SEVERAL discussions having taken place in recent meetings of the Archaeological Institute on the subject of medieval chain-mail, and an opinion having been expressed that all, or nearly all, the defences of this fabric were imported from Asia, I beg to call attention to a vellum-painting in a manuscript in the British Museum, representing very distinctly a European armorer at work upon a hauberk of interlinked

mail. The manuscript appears to be of the first half of the fifteenth century; it forms part of the Royal Collection (16 G V.), is in French, and entitled "Boccace des Clercs et nobles Femmes." The illumination here reproduced, occurs on folio 11. It will be seen that the tools employed by both the armorers, the worker in plate, and the mail-maker, are very simple and very few: a hammer and a pair of pincers are all that the illuminator presents to us; and it will be remembered that in the East, where old modes are so long retained, nothing strikes the European more forcibly than the extraordinary simplicity and fewness of the implements employed by native workmen in productions of the most elaborate character.

It being my wish to occupy on this subject a single page only of our journal, I abstain from all excursive topics which may invitingly present themselves.

MEDIÆVAL MILITARY ARCHITECTURE IN ENGLAND.[1]

By G. T. CLARK.

In the preceding part of this paper an attempt was made to describe the appearance, and to give an outline of the history of those earthworks in England and Normandy, upon which the Norman and Anglo-Norman barons founded their chief strong holds, and which, therefore, are connected with the military architecture of either country. It is now proposed to describe the buildings themselves, whether placed within the ancient earthworks, or altogether of original foundation, which constituted the fortresses of England in the eleventh and twelfth centuries, through the periods known in ecclesiastical architecture as the Norman and Transition, and which, in military architecture, include the Norman form of castle.

The Norman fortress is, of all mediæval military structures, the earliest in date, the simplest in form, the grandest in outline and dimensions, and the most durable in workmanship. It is characterized most frequently by its rectangular keep, sometimes by its shell keep, mound, and earthworks, and occasionally by its surrounding wall and mural towers.

The Keep.—This is a square or oblong tower, from 30 to 80, and even 100 ft. in the side, and from 50 to 100 ft. to the crest of the battlement. The walls are from 8 to 15 ft. thick at the ground level, and seldom less than 6 ft. at the base of the parapet. Each face, close to each angle, is reinforced by a broad flat pilaster strip of about a foot projection, and these, in the larger keeps, rise above the intermediate walls to form the exterior faces of four square turrets, one crowning each angle of the building, and standing free from 16 to 20 ft. Sometimes, as at the Tower, Rochester, and Colchester, one turret is circular, capping the angle, and three-quarters disengaged. These flanking pilasters sometimes stop 6 or 8 in. from the angle, sometimes completely cap it, the two then uniting to form an

[1] Continued from p. 109.

angle of their own. Sometimes they stop at the end of the wall, and thus convert the salient into a re-entering angle, which, especially in late examples, is often occupied, as at Scarborough, by a slender shaft, or three-quarter bead.

Between these flanks are usually from one to three pilaster strips on each face, of the same character and projection, but narrower, and these sometimes cease at the cills of the highest windows, but more generally die into the wall at the base of the parapet. All these pilasters rise from a common plinth, and are usually of the same projection. Sometimes they have two sets off. Their absence distinguishes the larger Peels, and the Scottish towers of the fourteenth century, such as Lochleven, from the Norman keep, which in outline they much resemble.

These keeps have but few openings. The basement is sometimes dark, but more commonly lighted by narrow loops of 2 to 3 in. opening, 8 to 12 ft. from the ground outside, but within splayed, and reached by stone steps in the recess. It is said that sometimes a part of the vault of the recess is hollowed so as to intercept an arrow or firebrand, which might otherwise strike the ceiling, and fall upon the floor, but is thus thrown down upon the stone step. The openings increase in size to the main, usually the second floor, and in large keeps this floor has two tiers of windows, of which the upper are the larger, and are the fourth tier from the ground. They were guarded with strong wooden shutters.

The staircases are commonly well or turnpike, round a solid central newel. They are contained in the angle turrets, one, a principal one, from 9 to 11 ft. diameter, usually ascends from the basement to the roof, as at the Tower and Canterbury. Others, in the other angles, commence at the first or second floor, and also ascend to the top. Porchester, though a large keep, has but one staircase. The position of these staircases is indicated outside by a winding line of loops. Sometimes the staircases are straight, contained in the thickness of the wall, as at Chepstow and Bamborough, where they commence just within the entrance. Sometimes, as at Goderich and Prudhoe, the straight part leads up to or is continued from a circular stair. Below the commencement of the subordinate staircases, the angles are usually occupied by mural chambers, which are found in other

parts of the wall of the basement and first floor. These are sometimes well-chambers, sometimes mere closets or small bed-rooms, sometimes oratories, but more commonly garderobes with sewers. Higher up the walls are threaded by galleries, of which one usually runs round the building, and opens upon each staircase. The principal of these galleries is at the level of the upper tier of windows of the main floor, where it traverses the recess of each, like a clerestory passage, and was used for defence, and for closing and opening the shutters. Such an arrangement was, of course, utterly destructive of any privacy in the apartments; but defence, and not comfort, was the ruling idea.

There were no absolutely underground chambers. The basement was on or 4 or 5 ft. below the ground level, and from 8 to 12 ft. high, and the first floor rather more. The second, or main floor, was, in large castles, 20 to 25, or even 30 ft. high, and the third, or upper floor, about 12 to 15 ft. These main floors were never vaulted, and where vaults are found, as at Richmond, London, Dover, Newcastle, and Arques, they are not original. These floors rested upon whole baulks of oak, 12 to 14 in. square, for which the apertures remain. At Corfe they are very remarkable for their size. The staircases and mural chambers were vaulted with plain, or rather rude, barrel vaults, in the chambers sometimes hipped, but seldom ribbed, and only in very late examples.

The interior of the larger keeps was divided into two equal, or nearly equal, parts by a cross-wall, pierced as at the Tower by doorways and small arches, or on the main floor by two or three large arches, as at Rochester; or, instead of the wall, were single cross-arches as at Scarborough and Hedingham. This wall carried the gutter which lay between the ridge roofs of the two divisions of the building. Norwich and Canterbury seem to have been crossed by two partition walls.

The roofs were sometimes nearly flat and leaded, as now at the Tower, but sometimes they had a high pitch, as may be seen by the water tables at Porchester, though there they spring low and do not rise much above the parapet. The gable ends seem in all cases to have been set back, as in a Scottish Peel, so as to leave the rampart walk unbroken.

The parapet was notched with embrasures of small opening, and at considerable distances, but original military battlements of the Norman period are very rare. The unbroken parapet, common in Norman churches, was of course inadmissible. The Norman parapet was a mere continuation of the wall, not set out upon corbels or over machicolations. There remain frequently holes in the parapet at the rampart level, as at Rochester, evidently to carry a timber 'brétasche,' but these are possibly not original. There were such in the White Tower, either added or repaired by Henry III.

The arrangements for covering the main entrance to these keeps, always on the first floor, are very curious, and in larger and late examples, such as Rochester, Hedingham, Newcastle, Dover, and Norwich, very elaborate. The smaller towers, as Goderich, St. Leonard's, Guildford, and Penllyne, were entered by plain small doors, usually flat-topped, but under a round-headed tympanum. These were approached by exterior steps, narrow, steep, and exposed, usually of wood. In the larger keeps the staircase, also exterior, was broader, more commodious, and covered over. Upon one side or face of the main building, was constructed a fore-building or smaller tower, also rectangular, from 20 to 30 ft. square in plan, in height two-thirds of the keep, and of two stages or one floor. This was placed against one end of one side of the keep, and concealed, as a vestibule, the main entrance. A staircase, built against the wall, and sometimes, as at Rochester, Dover, and Arques, commencing on the adjacent face and turning the angle, led up to the main floor of the forebuilding. The steps were protected by a side wall, and crossed at one or two points by a sort of gatehouse, the embattled roofs of which were reached from a narrow door in the first floor of the keep, usually opening from a mural chamber. At the stair-head was an open landing or bridge pit, covered by a drawbridge, which, when up, shielded the entrance to the forebuilding. This door opened into a vestibule occupying the whole floor of the forebuilding, and from it a second door led direct into the keep. The basement of the forebuilding was usually a dongeon, opening by a small door into the basement of the keep. At Rochester it is vaulted. Good examples of this forebuilding and outer stair may be seen at Dover, Castle-Rising, and Newcastle, and in a less

perfect state at Rochester, Hedingham, and Middleham. At Scarborough and Canterbury the building is removed, but its outline may be traced against the keep wall. As no such arrangement is found, or appears ever to have existed, at the White Tower, it has been inferred that this forebuilding is a later invention. It is found at Arques, but there is reason to doubt the early date usually assigned to that keep. In almost all the Norman keeps, it has been found convenient to break a door direct into the basement, and the first floor door is then converted into a window, as at Goderich and Canterbury. This alteration seems to have been made at an early period, perhaps when the addition of strong exterior walls gave sufficient security to the keep.

Also there is sometimes found a small door in the basement, opening a few feet from the ground into the bridge pit below the outer stair, but this does not appear ever to be original. There is such a door at Rochester and at Corfe; this latter, however, has been enlarged. There is again another small door sometimes found on the first floor, opening by a plank bridge upon the adjacent enceinte wall. This is seen at Rochester and at Desmond's Castle at Adare.

The defences of the main portal were always a strong wooden door, barred with oak, and usually, always in later keeps, a portcullis. This, which is said to be a Roman defence, was here always single, and worked from a small mural chamber in the floor above. From the size of the groove, the grate seems to have been of iron. There is no portcullis at the Tower, Guildford, Castleton, or St. Leonard's. It appears at Hedingham, Scarborough, and Rochester.

The interior arrangement of these keeps was simple. The basement was a cellar and place for garrison stores. The first floor was a guard room. The second floor was occupied by the state apartments, and the upper floor seems to have been the armoury, and sometimes the chapel. Probably stores, and heavy missiles for the defence of the battlements, were deposited along the rampart walk.

The well was a most important appendage, and constructed with much care. The pipe, of hewn stone, was usually carried up to an upper floor, and sometimes to the roof. At Kenilworth, Dover, Porchester, and Newcastle, it is so contained in the outer wall, ending above in a well-

chamber, in the vault of which was a sheave. At Rochester and Norwich the pipe is in the cross-wall, and in the former ascends to the roof, having an opening in a sort of recess or cupboard upon each floor, and below the groove notches in the ashlar lining to allow a workman to go down for repairs. There is a similar arrangement at Canterbury. At Richmond the well is in the basement only. At Arques it is clumsily carried up to the first floor in a sort of detached flue or chimney, probably an addition. At Dover and Colchester the well has been closed up. No well has been discovered in the White Tower, at Guildford, or at Castleton. At Bamborough the well is sunk 145 ft. through whin rock. At Carisbrook, the older, and probably Norman well, known to have been 300 ft. deep, has been covered over, and its place is lost.

The chapel was almost a necessity in the eleventh and twelfth centuries. At Rochester, as became an Episcopal castle, the chapel occupied half the upper floor. But the most complete, as well as the earliest Norman military chapel, is that of the White Tower, indicated by a semicircular bow on the east side, containing the apse. This very perfect apartment has nave, aisles, and a spacious clerestory, all vaulted. It runs through the two upper floors of the building, and rests, in the two lower floors, upon a crypt and sub-crypt, both vaulted, and having semi-domed east ends. At Dover and Newcastle the chapel is in the upper floor of the forebuilding. In other instances it was a mere oratory, either occupying a mural chamber or constructed with wood and plaster partitions in one of the larger rooms. The regular castle or garrison chapel was usually in the inner ward, as at the Tower, and also at Ludlow, where the original circular late Norman nave remains. At Norwich it was a church just outside the bridge, and at Tutbury and Leicester, probably the chapels were the large churches still standing, one just outside, and one just inside the castle walls.

The kitchen at Rochester was in one end of the forebuilding, but most commonly it seems to have been, like the chapel, bratticed off from a larger room, with a plaster chimney. It is remarkable how seldom there are traces of so very necessary an apartment within our Norman keeps. No doubt a large kitchen was only wanted in the rather

rare event of the keep being besieged. For ordinary garrison use the kitchens were in each ward.

Most of the Norman keeps have garderobes in the walls, provided with vertical shafts, dropping either into an exterior shoot at the foot of the wall, or corbelled out upon its face.

Fireplaces are always found in the late keeps, not always in those of earlier date. There is but one in the White Tower. At Rochester the vents terminate in the outer wall, a few feet above the hearth, and, as at Colchester, they are double, opening one on each side of a pilaster, in the angle. Elsewhere they rise vertically to the battlements. Later accounts show that there was much use of flues of wood and plaster of a temporary character, carried up against the wall, and these have been no doubt in use in nearly all the Norman keeps, which never could have been warmed by the few hearths now remaining in the walls.

Besides the sewer vents and chimney flues the walls of some keeps are said to be pierced by shafts for the lifting up of timber and heavy missiles to the battlements, and for the transmission of orders from one story to another. Mr. King describes such shafts and tubes, and says that the former commence in the basement, in recesses large enough to allow of a balk of timber being got into the cavity, and that they branch off so as to supply the different floors. This may or may not be so, but in the example indicated there is nothing of the kind. The cavities taken for speaking tubes, seem to be only the spaces once occupied by the bands or chain courses of timber for holding the work together horizontally.

The earlier keeps are very devoid of ornament. The Tower has not even a moulding, save in the chapel, and an exterior blocking over its main tier of windows. No doubt it has been much mutilated, but though the ornaments might have been removed, the courses of freestone would still be distinguishable from the ordinary rubble masonry. Some of the later keeps exhibit details of excellence but much simplicity about the doors, windows, and fireplaces. Such is the case at Dover, Rochester, Hedingham, and, with more richness, in the chapel at Newcastle. Bamborough has a fine doorway, early in the twelfth century. The exterior of Norwich is panelled in tiers of arches. Goderich, otherwise

plain, has an exterior string of hatched or chevron work. In these keeps the openings are usually round-headed, and where flat, there is a relieving arch above, as at Chepstow. Occasionally false arches are turned, in the thickest part of the walls, as though a doorway had been closed up. Such are observed at Dover, Norwich, and Guildford. They are thought, but scarcely upon good grounds, to have been intended to invite an attack.

It is singular that a Norman keep should seldom, if ever, have any chambers under ground, though the floor of the basement is sometimes sunk 4 to 5 ft. The mural cells may have been used as prisons, and would be sure ones, though the loops usually command an extensive view, but the basement of the keep, with its timber ceiling, would scarcely be secure. The basement of the forebuilding, when vaulted, as it sometimes was, would be safe, and is generally called 'the prison.' A mandate of 17 Hen. III. directs to be ceiled two cellars below the king's wardrobe and his great chamber; and these no doubt were on the ground floor supporting the state apartments. It may be, however, that these accounts relate to buildings in the wards and not in the keep.

One or two keeps have buttresses of bold projection, greatly in contrast to the usual flat pilaster. This is seen at Colchester and at Arques, where the exterior stair passes through one of them. At Arques also the buttresses are turned to account in the upper story, arches being thrown across from buttress to buttress, upon which are built chambers, and on one face a chapel, through the floors of which missiles could be dropped upon the assailants below. Arques, however, is built of chalk and flint, with little or no original ashlar, and it is, in consequence, impracticable to decide with certainty what is original.

Norman keeps differ in workmanship and, of course, in material. The White Tower is of rubble rudely coursed with very open joints, but the plinth, and coigns, and pilasters, seem to have been of coarse Kentish rag ashlar also open jointed. St. Leonard's is an excellent example of early Norman rubble with open joints; and this may be said of the basement of its adjacent Abbey church at Malling, and, perhaps, of the Tower of the parish church. Guildford exhibits some herring-bone workmanship, as do Chepstow, Penllyne in Glamorgan, and the Norman wall at Tamworth. In the

chalk districts, flint was freely used as at Canterbury and Saffron Walden. In the South the ashlar is often Caen stone. Corfe is of excellent local ashlar, as is most of Kenilworth and Porchester. Norman work is always of sound execution, though often rough, and it is very durable. Chain courses of timber were much in use, laid in the heart of the wall, at intervals of 15 or 20 ft. Sometimes breaches have disclosed these timbers, which have rotted away, leaving cavities which have much exercised the imagination of antiquaries.

The Norman keep was usually placed upon the highest part of its enclosure, often very near to the enceinte, as at Rochester, and sometimes forming a part of it as at Ogmore, Porchester, and Richmond. It thus commanded a part of the exterior defences, and placed the citadel in close communication with the ramparts. At Arques, if M. le Duc's exceedingly ingenious description be entirely justified by facts, this communication was marvellously complex.

The rectangular keep may with perfect truth be termed the main and most usual characteristic of a Norman fortress, and it was that feature with which, upon a new or unoccupied site, the Norman baron commonly commenced his work. But it was not the only characteristic, and where the security which it afforded could be gained by other and easier means it was commonly dispensed with. Those means were afforded by the earlier mound or motte, and where this is present the rectangular keep is wanting, and in its stead the mound is occupied by a polygonal shell of masonry, which, being upon steep and high ground, was out of the reach of ordinary attacks, and from its great height commanded the other defences as effectually as would the regular keep.

Oxford and Saffron Walden, are probably the only examples in England of the two works in one fortress. With these exceptions, if such they really be, there is, probably, no instance of a rectangular keep where there is a full-sized mound, that is, not a mere 'cavalier,' but a mound large enough to carry a shell of tolerable area. At Canterbury the mound is small, and belongs to the defences of the town, not of the Castle. At Rochester, where there is a large mound, it is placed outside the Castle ditches, and was no part of the Norman fortress. Of the five

great fortresses which covered the road from Dover to London, Dover itself, Canterbury, Rochester, and the Tower, have rectangular keeps; the fifth, Tonbridge, as early in date as any of them, having a mound, has not the keep, neither has Arundel, also a very early castle. Warwick and Kenilworth, near together, and occupied by the Normans immediately upon the Conquest, exhibit the same difference; Warwick, the old Saxon seat, has a mound and no keep; Kenilworth, a purely Norman fortress, has a keep and no mound. And so of the capital cities, palaces, baronial seats, and chief towns, Bristol, Bamborough, Carlisle, Corfe, Chester, Colchester, Guildford, Gloucester, Lancaster, Newcastle, Nottingham, Porchester, Scarborough, have or had rectangular keeps and no mounds, while mounds without keeps are, or were, found at Bedford, Berkhampstead, Cambridge, Cardiff, Clare, Carisbrook, Devizes, Durham, Hereford, Hertford, Hinkley, Leicester, Lewes, Lincoln, Marlborough, Totnes, Worcester, Wallingford, Windsor, Wareham, and York. The fact seems to have been that the chief seats of the Saxon Thanes were for the most part provided with mounds upon which their timber residences were constructed, while the less distinguished lordships or those of Norman creation, received the rectangular tower alone, as at Brougham, Brough, Bungay, Bowes, Castle-Acre and Castle-Rising, Chepstow, Clitheroe, Castleton, Goderich, Helmsley, Hedingham, St. Leonard's, Prudhoe, and several others.

There is some difference of opinion as to the date of these shell keeps, whether they preceded or followed, or, as seems more probable, were contemporary with the rectangular keeps. Arundel, the only Castle recorded in Domesday as existing at the Conquest, has a shell keep which may possibly be a few years earlier than that event, the work of one of the Norman artizans known to have been fostered by the Confessor. Some of these shells, however, like the square keeps, verge upon the early English period, and on the whole it seems probable that they were introduced by the Normans, and continued to be constructed for about a century and a quarter, or until all the mounds occupied by the Normans were so crowned.

These shell keeps evidently replaced the "gettimbred" houses of the Saxons, and were composed of a shell of masonry,

polygonal or circular in plan, with walls from 8 to 11 ft. thick, and 20 to 30 ft. high. Sometimes the exterior angles were strengthened by flat Norman pilasters, but more commonly the walls were of plain rubble, having a plinth and coign stones of ashlar. Such a building was far more likely than a solid tower to stand without settlement upon made ground.

The space thus enclosed, from 50 to 100 ft. diameter, was open in the centre, but around it were buildings like sheds, abutting against the ring wall. Such was the arrangement in the round tower at Windsor before it was raised and closed in by Wyatville. Sometimes upon the wall was a gatehouse, with a covered stair, ascending the mound, and representing the old wooden bridge. At Cardiff the gatehouse was rebuilt by the Beauchamps, and proved too heavy for the mound, slipping down into the ditch a century or more ago: the more usual entrance, however, seems to have been by a doorway in the curtain, either of large size as at Lincoln, or a mere postern as at Tamworth.

The shells vary somewhat in plan. Tonbridge was oval, 86 ft. by 76 ft., with 15 exterior pilasters, and walls 11 ft. 6 in. thick. It is attributed to Bishop Odo. The mound covers nearly an acre. Pontefract was composed of six roundels, three large and three small, and was 64 ft. across. Clifford's Tower, at York, seems to have somewhat resembled Pontefract. It was an oval, 64 ft. by 45 ft. It stood outside the castle enceinte, and had its own drawbridge and well. Cardiff is polygonal, without pilasters. Tickhill was round, with 16 exterior pilasters, the foundations of which remain. At Lincoln the shell is nearly circular, and is upon the curtain, having a door inside the place, and one outside.

These structures upon mounds are not now very common, the seventeenth and eighteenth century taste for a summer-house or 'gazebo' having proved fatal to them. Cardiff, Arundel, and Lincoln, are original, and tolerably perfect. Tamworth is, in substance, original. At Tonbridge and Berkhampstead the foundations are still seen, and are thought to be traceable at Warwick. At Oxford, Wallingford, Hinkley, and Leicester, all the masonry above ground has been removed. At Windsor, the original shell, of late Norman date, seems to have been raised and strengthened by Edw. III., as was the Edwardian wall by Geo. IV. Arundel ought to be

the earliest of these buildings, though it may be doubted whether the present shell is as early as the Conquest. Pontefract is probably one of the latest, verging on Early English. At Alnwick the shell is built upon a natural knoll, and forms the inner ward of the castle, the main buildings being placed within and around it, leaving the centre as an open court. The plan of this fine keep points to a transition date; one of the gatehouses of the castle is pure and highly enriched Norman. At Leeds Castle, in Kent, is an island covered by one of these shells, probably of late Norman date, though rebuilt or much altered. The open court is preserved.

The position of the mound varies in different castles. At Tutbury, Warwick, Lincoln, Leicester, Tamworth, Tonbridge and Wallingford, it stood on the line of the enceinte, the curtain ascending its slope. At Berkhampstead it is outside the inner ward, but within the main or outer ditch, and something like this is its position at Pontefract. At Cardiff it stands within the main area, but had its special ditch, now filled up, and stood upon the line of defence of the inner ward, now destroyed. At Hereford it seems also to have been central. Both at Tamworth and Berkhampstead there is no trace of a wall but up one side, so that it is probable that in these instances the shell was an exterior projection, a sort of spur-work, connected with the main fortress only by a single strong wall, up the ramparts of which ran the gallery of communication.

The builders, whether of keep or shell, certainly generally intended to enclose these works within an exterior wall, sometimes, as at Arques and Castleton, the only exterior defence; the second and third lines of wall, formed by Hen. III. or Edw. I., being usually additions of later date.

The keep or shell completed, and a place of security in the event of an attack thus provided, the next step was the enceinte wall, but this not being of such pressing necessity, was sometimes postponed for half a century or more, during which time the garrison must have trusted to ditch, bank, and palisade, the keep of masonry being their final security. Norman work is of so enduring a character, that had any considerable number of curtain walls and mural towers been constructed in that style, they would have remained more or less perfect, both in Normandy and England. They

are, however, rare. Even around Norman keeps the walls are seldom wholly Norman. The stoutest wall at Corfe is probably of the age of King John, and though there may be fragments of Saxon work, there is no Norman curtain. The oldest part of the curtain of the Tower of London is little if at all earlier than John, though from its strength and workmanship it well deserves to be Norman. The great wall of Cardiff Castle, 40 ft. high and 11 ft. thick, sound as when built, is probably of the early part of the twelfth century, and has survived much of later work. At Kenilworth (Hen. II.) there remains in the enceinte a round Norman tower. At Carlisle, Chepstow, Rochester, Prudhoe, Richmond, Scarborough, Lincoln, Alnwick, and Tamworth, parts of the enceinte are Norman, as is a part of Southampton town wall, and of the ward wall at Porchester, where it is mixed up with Roman work. A large proportion of the oldest curtains now standing, are of the age of Hen. III., by which time no Norman work could have fallen into decay. The wall of Bamborough may have Norman foundations, but the superstructure is of the time of Edw. II. On the whole it seems probable that while the keep was built or the mound crested, with all convenient speed, as places of absolute security, the Saxon palisades, banks, and ditches, were retained for many years.

Sometimes, indeed, the great extent of the older earthworks, or their incapacity for carrying the weight of walls and towers, or the facility with which works so placed could be mined, seems to have altogether prevented their employment at all. Thus, at Cardiff, where the large rectangular enclosure is contained on three sides within high banks,—wanting, as was not unusual, towards the river,—a walled court was formed between the river and the earthworks, which are actually thus cut off, and formed into an outer ward. The inner ward, contained within four stout walls built upon firm ground, was secure against the miner, the rain, or generally against an escalade; but the outer ward, with its earthworks and wet ditch, was left to those defences alone. Along the crest was probably a palisade, but the wall was an addition in the reign of Elizabeth, and when pulled down and rebuilt in 1863, its foundations were found to be only about 2 ft. deep, nor were there any traces of deeper masonry. At Hereford, where two sides of the

main ward of the castle are still enclosed by banks of no ordinary size, and evidently of early date, they bear no trace of deep strong walls or of massive towers. Also at Berkhampstead, a Saxon fortress, occupied by the Normans, though the inner ward, having no bank, is walled in, the middle and outer wards are defended by ditches and banks alone, the latter far too light to carry masonry, and which could only have been crested by a palisade.

Where the castle crowned a steep hill, and sometimes where there was an earlier bank, the face towards the field was scarped, the wall built as a revetment, and the terre-plein behind converted into a terrace. Thus, at Arques the chalk rock has been scarped for 30 ft. down, and a Norman revetment gives an exterior wall of that height, with a parapet above it. In parts of York and Chester the wall is a revetment against earlier banks, as at Tutbury and Exeter. At Warwick the buildings of the castle are above a vast revetment, constructed against a red sandstone cliff, so that the entrance from the court is on the third story, counting from the river front. A terrace behind a wall gave great additional strength, and much increased the facilities for active defence.

The Cornish castles are usually round, and some of them are of the character of these shell keeps. Such are Restormel, which occupies a sort of promontory, and Trematon, which crowns a natural hill. Both are large courts, open in the centre, with buildings against the walls. Restormel is rather Early English than Norman; Trematon may be earlier; but all access to it is refused.

Norman gatehouses are rare. Frequently the entrance was a mere archway in the curtain, of moderate size, round-headed, and strongly gated and barred with wood. Such an entrance in the late Norman style remains at Bridgend, in Glamorgan. At Cardiff, though the gateway has been altered, and in its present form is probably Tudor, it evidently, as at Ogmore, represents the original Norman opening. At Porchester one gateway at least is Norman, and is composed of a low rectangular tower, with a passage through it and a floor above; and such is the arrangement of the Norman entrance to the inner ward at Arques, where, besides the outer and inner doorways, is a central one in a cross wall, dividing the tower into two parts. Such gate-

houses are very plain, of slight exterior projection, and without flanking towers. The passage was not vaulted, and had two or three gates. Sometimes the portcullis was used, but there were no machicolations. There seems commonly to have been a drawbridge. Prudhoe has a Norman gateway of plain character, and unflanked, but the superstructure and contained chapel are of the age of Edw. II. The gate of Bamborough is unflanked and of slight projection. It has lateral columns and recessed Norman arches.

The hall was an essential part of a Norman castle. In the keep it occupied the second floor, as at Rochester, where it divides the story with the private apartment. There was also an exterior hall, in more general use, attached to the buildings of the inner ward. Such halls are now rare, but there is a fine and perfect one at Oakham, one much mutilated at Leicester, and another much altered at Winchester. There are also Norman houses, chiefly occupied by the hall and its cellars at Christchurch, and at Desmond's Castle, near Limerick. No doubt timber was much used for domestic buildings, which accounts for their disappearance.

Subterranean passages connected with posterns are often talked of, and sometimes found, of the Norman period. They are, of course, most common where the castle, as at Dover, Arques, Old Sarum, and Windsor, stands upon a chalk rock. At Windsor there are two, or perhaps three, passages, at least as early as the Norman period, which passed from the inner ward, beneath the curtain, and opened into the ditch. One of these galleries is now open. It is driven through the chalk, and unlined, but the inner Norman doorway remains, and the outer end has also been discovered. The passage at Old Sarum was very similar. It is now closed up. At Dover, as at Arques, the galleries are extensive, and were intended for countermining, running along the scarp of the ditch, and occasionally opening into it. Windsor also possesses another and much larger postern gallery, which is carried from the lower chamber of a tower near the horseshoe cloister, and opens into the ditch near the river bridge. This is lined, and a work of considerable beauty. In its present form it is of the age of Hen. III., but the passage itself is probably Norman, or earlier. Such passages were no doubt intended for the dispatch of bodies of troops, to surprise the besiegers and burn their engines.

The character of the earlier Norman defences is passive

strength, with much ingenuity of detail, but with little military or architectural science in the disposition of the material, and little attempt at a flanking defence. At Cardiff one angle of the great wall is perfectly plain. Whether in the original design it was in contemplation to supply this want by a vertical defence is uncertain. No Norman architect seems to have employed machicolated parapets of stone, from behind which missiles could be dropped securely upon the foot of the wall; and it is uncertain whether the system of hoarding, in use in the thirteenth century, was an original or applied defence to the Norman keep. It has been supposed that heavy engines of war were placed upon the roof, but the roofs were certainly not always flat, and with the limited garrison that could be lodged and fed within such a structure, the labour of lifting up heavy missiles would be severe, nor could any considerable store of such ammunition be heaped up upon a timber roof of the usual span. Further, with light missiles, such as arrows or darts, the course from a height of 70 or 90 ft. would be less direct, and their velocity less considerable, than from a loop at a lower level.

Where Norman keeps have not been purposely destroyed, they are usually the most perfect and the most striking feature of a castle, whether in occupation, like Dover and the Tower, or in ruin like Hedingham or Kenilworth. This latter condition has also the advantage of being most favourable to the antiquary. Much may be wanting, but nothing is concealed. What has fallen is often later and less interesting work.

The Norman keeps suffered heavily in the great civil war. They were, from their great strength, capable of holding a moderate garrison in safety when artillery was imperfect or not at hand, and there was not time for a blockade. Hence, as fast as these keeps fell into the hands of the Parliament, they were ordered to be 'slighted' or dismantled, and blown up with gunpowder. Corfe is an example of unnecessary severity in this respect, and Kenilworth of equally effective but much less vicious injury.

Also, in very modern times, much injury has been done. The work is too sound, and the mortar too firm, to allow the ordinary material to be cheaply quarried, but the ashlar of the window and door cases has been removed, and the tenant has usually found it convenient to break one or

more gaps into the basement floors. The White Tower has been cruelly pierced in several places for the convenience of moving stores. Sometimes, as at Goderich, these basement entrances are of early date, but it is believed they are never original.

In considering the limited and very inconvenient accommodation within a Norman keep, it should be remembered that they were only intended for residence in case of an actual siege, and then very often received only the mantenants of the lord, and not his mercenaries. Indeed, the builders of some of these keeps seem to have feared these troops almost as much as they did the enemy. The staircases and passages are often contrived quite as much to check free communication between the several parts of the building as between its inner and outer sides. Further, the excessive jealousy in guarding the entrance, the multiplied drawbridges, grates, and doors, the steep winding and narrow staircases, and the sharp turns in the passages, although they kept out the enemy, or if he got in placed him at a disadvantage, also rendered impracticable the rapid re-entry of the garrison, so that when the base court was taken by surprise or assault, the defender had not time to retire into the keep, which was thus liable to be taken by a *coup de main*, or reduced because defended by insufficient numbers. Otherwise, with a sufficient and faithful garrison, and ample provision and military stores, the Norman keep was nearly impregnable. The walls were too high to allow the roof to be reached by fire-balls, and too thick to be mined or breached, especially if properly defended from the summit.

Though reducible to one type, the varieties in detail of the rectangular keeps are infinite.

There exists no list, nor attempt at a list, of the rectangular keeps, or of the mounds occupied by the Normans in England. The following is an attempt, though an imperfect one, to supply the want :—

Norman Rectangular Keeps.

Bamborough. In progress, 1131. The well discovered, 1770.

Bowes, Durham. 75 ft. by 60 ft., by 53 ft. high.

Bridgend, Glamorgan. Late. Now destroyed ; basement remains.

Bridgenorth, by Hen. II. (?) Destroyed.

Bristol, 1147. Destroyed.
Brough.
Brougham Castle.
Bungay. 54 ft. by 54 ft.
Canterbury. 88 ft. by 80 ft., by 50 ft. high. Late. Norman ornaments. Well in the wall, Walls 11 ft. thick.
Carlisle.
Carnbrea (?), Cornwall. Peculiar; perched upon a point of rock.
Castle-Acre, before 1089 (?).
Castle-Rising.
Castleton-in-the-Peak. 38 ft. by 38 ft.; walls 8 ft. thick. No portcullis; no well.
Chepstow. Peculiar; Roman materials; herring-bone work.
Chester. Much altered.
Clitheroe.
Clun, Salop.
Colchester. 168 ft. by 127 ft. Well probably in cross wall.
Corfe.
Dover. Hen. II. Late. Norman ornaments; well covered up.
Fonmon, Glamorgan. Late. Probably Early English.
Gloucester. Destroyed.
Goderich.
Guildford. 42 ft. 6 in. by 47 ft., by 70 ft. high; no portcullis; herring-bone work. Reputed early.
Hedingham.
Helmsley.
Hopton, Salop.
Kenilworth. Hen. II.
Knaresborough.
Lancaster. A prison; much altered.
Leonard's, St., Kent. Very early.
London. Early. No well; no portcullis.
Ludlow. Connected with later buildings.
Middleham.
Newcastle. Late. 60 ft. by 60 ft., by 80 ft. high. Ornate; deep well in wall.
Norwich. 93 ft. by 98 ft. Well in cross wall.
Nottingham. Destroyed.
Ogmore, Glamorgan. Late.
Oxford. Probably 1142.
Penhow, Monmouth. 32 ft. by 22 ft. Walls 12 ft. thick. Probably Early English.
Penllyne, Glamorgan. Herring-bone work.
Porchester. Twelfth century. Well in wall.
Prudhoe.
Richmond. About 1146.
Roche (?). Pembroke. Perched upon a small rock.
Rochester. 75 ft. by 72 ft., by 104 ft. high. Wall 12 ft. thick. Well in cross wall. Late.
Saffron-Walden. 36 ft. by 36 ft. Wall 12 ft. thick of flint rubble.
Scarborough. Probably 7 Hen. II. One side gone.
Wattlesborough, Salop.
Winchester. Bishop's Castle. 1138.

Among the rectangular keeps built in the eleventh and twelfth centuries, and of which remains are to be seen in Normandy, M. de Caumont enumerates the following :—

Beaugency-sur-Loire. 72 ft. by 62 ft. Walls 20 and 24 ft. thick, 123 ft. high.
Brone. Built upon an artificial mound. 4 stages; 5 pilasters on a side. Fireplaces and mural galleries.
Chamboy (Orne). A.D. 1150—1200. Exterior resembles Dover and Newcastle.
Chavigny-by-Poitiers.
Domfront. Broad flanking pilasters.
Du-Pin in Calvados. 52 ft. by 34 ft. at base.
Islot. 44 ft. by 44 ft., and 90 ft.

high, with three pilasters on each face.

St. Laurent-sur-Mer. Oblong; herring-bone work; two concentric but rectangular earthworks, with rounded angles.

Loches. 76 ft. by 42 ft.; with a forebuilding, 38 ft. by 21 ft. Of four stages with half round pilasters. Basement now vaulted. Staircases circular; walls 8 ft. thick; vertical flues; a large window in each upper floor for taking in stores; holes above to support a Bretasche; charcoal mixed with the mortar.

Montbazon.

Mont-Richard. Three pilasters on each face.

Nogent-le-rotrou, Eleventh century. 4 stages; 4 pilasters on each face. A considerable batter.

Plessis-Grimault. A. D. 1000—1050. Herring-bone work; the enceinte walls backed with banks.

Pomeraye.

Pons (Charente Inférieure). Oblong, with 5 and 3 pilasters.

Tonnai-Boutonne. 3 pilasters on each face.

The keeps in Normandy are more usually oblong than square in plan. They extend into Anjou, Poictou, and Maine.

Mounds Incorporated into Castles of Masonry.

Abergavenny.
Aldford.
Arundel. Shell remains.
Bedford.
Berkhampstead. Foundations of shell.
Bourne. Earl Morcar, 870. Lord Wake's Castle destroyed.
Bramber.
Caldecot, Mon.
Cambridge.
Cardiff.
Carisbrook.
Carnhoe.
Castle Hill, Sheffield.
Chichester.
Chirbury.
Christchurch.
Clare.
Devizes.
Dodleston, Cheshire.
Dunham.
Durham.
Eaton-Socon.
Fotheringay.
Gleaston.
Groby.
Hatfield. An Honour.
Hawarden.
Hereford. Destroyed.
Hertford. An Honour.
Hinkley. An Honour.
Kinderton, Cheshire.
Leicester. An Honour.
Lewes. An Honour.
Lincoln. Shell perfect.
Malpas.
Marlborough.
Mold.
Montgomery.
Morpeth.
Oldcastle, Cheshire.
Oxford.
Pevensey.
Plashy, Essex.
Pontefract. Shell described by Leland, as of 6 rowels, 3 large and 3 small, 64 ft. diameter. The mound occupies a salient of the area.
Pulsford.
Restormel. Shell, but no mound.
Risinghoe.
Saffron-Walden, called Buryhill.
Sandal.
Stafford.

Shockleach, Cheshire,
Skipsea in Holderness.
Stamford. Two mounds, one beyond the Welland. Destroyed.
Tamworth. Shell remains, and curtain, with herring-bone work.
Tickhill. An Honour. Oval bank, with mound at one end, and entrance at the other. Shell circular; 16 external pilaster foundations remain. A well inside.
Toddington?
Tonbridge. Mound 70 ft. high, remains of shell; oval, 86 ft. by 76 ft.; walls 11 ft. 6 in. thick; 15 external pilasters.
Totnes. An Honour. Shell remains.
Trematon. Shell. Mound probably natural.
Ullersford, Cheshire.
Wallingford.
Wareham. At angle of rectangular enclosure. Castle buildings gone. A Saxon seat.
Warwick. Saxon seat.
Windsor. An Honour.
Worcester. 28 ft. diameter at top. Destroyed. Was a Saxon seat with a Norman Castle, by D'Abitot.
Yielden.
York. Two mounds, one on each bank of Ouse.

Mounds supposed to be Military but not known to have been connected with Works in Masonry.

Auldchester, near Bicester. Stands in a rectangular camp 1000 ft. square.
Bailey-Hill, near Bradfield, Yorkshire. An oval area with bank and ditch. At one end, on the enceinte, a mound 174 ft. diameter at base, and 36 ft. at top; about 43 ft. high.
Canterbury. Connected with the defences of the town.
Castle-Hill, near Bradfield.
Castle-Pulverbach, Salop.
Eddisbury, Stafford.
Gelligaer, Glamorgan.
Halton, Yorkshire. Residence of Earl Tosti.
Hertford. Probably Saxon. One of two; now removed.
Hornby in Lonsdale.
Laughton-en-le-Morthen. Residence of Earl Edwin.
Melling, Yorkshire.
Mexborough.
Oldbury by Bridgenorth.
Oswestry.
Pentyrch, Glamorgan.
Penwortham on the Ribble.
Robin-Hood's Butt, Clapham, Yorkshire.
Sedburgh, Yorkshire.
Stamford, one of two; now removed.
Talybont, near Towyn.
Woolstaston, Salop.
York, on right bank of Ouse.

The rectangular keep, and circular or polygonal shell, with other Norman features, seem to have retained their hold upon English castle builders through the reign of Stephen, 1135—1154, into that of Hen. II., 1154—1189, or for rather above a century from the Conquest; or even rather later, for the shell at York had decided early English features; and this is also the case with such rectangular keeps as Penhow, the cradle of the Seymours, in Monmouthshire,

well described by Mr. Morgan, and with Fonmon and Sully, in Glamorgan, of which latter the foundations were opened about twenty-five years ago.

The reign of Stephen was prolific in *castra adulterina*, fortresses built in haste and without licence, many of which were destroyed by his successor, though the Mowbray rebellion is said to have been the occasion of building a considerable number. Henry, no doubt, found the castles of the realm too numerous for the power of the crown, or the peace of the community; for during his reign, and those of his sons, Richard and John, more was done in building enceinte walls, and in strengthening old castles, than in building new ones. It would seem that the old castles were usually planned upon a sufficiently extended scale, and that the new walls followed the line of the old earthworks. Where this was not the case, the old walls were left unhurt, or somewhat strengthened, and another ward was added, either concentrically, as at the Tower, or on one side, as at Corfe. Hence while we sometimes find the old Norman walls amended and strengthened by an occasional mural tower or a gatehouse, as at Richmond, Rochester, Bamborough, and Scarborough, we find in other cases our finest examples of castellated architecture, as at Dover, combining the Norman keeps and interior enceinte with exterior additions, of the reigns of Hen. III. or Edw. I.

The transition from Norman to Early English, which in ecclesiastical architecture constitutes a period of great interest, is by no means, in England at least, so strongly marked in military structures. The new keeps for a time were rectangular, and their arches round, or nearly so, till late in the twelfth century. At Dover the dog-tooth ornament, and a bead moulding, combined with Norman features, mark a transition period, but this is not common. The later keeps are known sometimes by the greater boldness of the pilasters, which became buttresses, as at Newcastle and Dover, sometimes by their improved ashlar and closer jointed masonry, or by the presence of ribs upon the angles of the hip vaulting of their mural chambers, and most certainly by their greater ornamentation about the doors and windows and fireplaces. There is little change in their internal arrangement, and no tendency towards flanking defences.

Original Documents.

WILL OF RICHARD DE ELMHAM, CANON OF THE CHURCH OF ST. MARTIN LE GRAND, LONDON. Dated June 28, 1228.

FROM THE MUNIMENTS OF THE DEAN AND CHAPTER OF WESTMINSTER.

Communicated by JOSEPH BURTT, one of the Assistant-Keepers of the Public Records.

THE subjoined document, which by the courteous permission of the Dean and Chapter we are permitted to bring before our readers, has been recently found amongst the evidences preserved in the Muniment Chamber at Westminster. It is the will of one of the canons of the collegiate church of St. Martin's Le Grand, within Aldersgate, one of the most ancient of the foundations in the metropolis; some writers, indeed, have assigned its origin to as remote a period as the seventh century, and have stated that it was founded in the year 677, in memory of a Saxon sovereign. We are assured, however, by Bishop Tanner that it was founded not long after that time, possibly by Wythred, king of Kent, about A.D. 700, and that it was chiefly endowed by two Saxon nobles, about ten years previous to the Conquest.

The possessions and privileges of the church of St. Martin were confirmed, with fresh grants, by the Conqueror in the year 1068; the confirmation was subsequently ratified with great solemnity on occasion of the coronation of Mathilda his queen at Westminster. Great privileges were conferred upon this collegiate church, being a royal free chapel, such as right of sanctuary, and exemption from ecclesiastical and civil jurisdiction. In 1502 the church and all its possessions were given by Henry VII. to the abbot and convent of Westminster; and, as parcel of that monastery, St. Martin's was granted, 34th Hen. VIII., to the Dean and Chapter of Westminster, as part of their endowment. Hence, doubtless, the following document, that had previously been preserved amongst the evidences of the collegiate church of St. Martin, is now found in the extensive assemblage of valuable documents at Westminster.

The testator was doubtless a native of Norfolk; he describes himself as "de Elmham dictus;" he makes a bequest of three marks to Cecilia his sister, residing at Geystwick near Foulsham, places in that county in the immediate neighbourhood of North Elmham. He appears, by the amount of monies and valuable effects, plate, books, vestments and household appliances, to have been possessed of considerable property. He held the benefice of Westwell, a parish situated near Burford, in Oxfordshire. To the hospital at the last-named place he bequeaths a brass pot and a pan (*patella*) that were at Westwell. To the church of that parish he leaves his unbound antiphonary, in quires ("quod ligari debet"), and a psalter therewith; to each of his two servants at Westwell he gives a mark, "pro servicio suo." William de Ripa, his vicar at Westwell, is named as one

of his executors, with the legacy of a psalter, glossed, to ensure faithful performance of the provisions of his will. To another of the executors, Nicholas de Neville, the worthy canon bequeaths "pulcram mappam meam,"—his fair tablecloth.

The bequests to churches and to various conventual establishments are numerous, not only to such as were in London and adjacent to the great collegiate foundation of which he was a member, but in more distant localities,—Stratford, Hertford, and to the nuns of Ankerwick. He leaves a small contribution to London Bridge, a form of testamentary benevolence by no means uncommon. Thus Joan, Lady Bergavenny, by her will dated 1434, devised not less than 100*l.* to the making and amending of "fabul brugges" and foul ways.[1]

To Robert de St. Medard the testator gives his book "de tractatu Pape Innocencii," doubtless one of the treatises of Innocent III., whose numerous works have repeatedly been printed. The will does not indicate which of the writings by that eminent pontiff on moral and controversial questions may have been here intended.

The canon devised to master Nicholas de Farnham, the king's physician, his "portehors," namely, the breviary or *portiforium*. Of that learned and distinguished ecclesiastic, Matthew Paris has given high commendation;[2] he had devoted himself in earlier life to the study of medicine, chiefly at Bologna, and was much in favor with Henry III. and his Queen. On the death of Alexander, Bishop of Coventry and Lichfield, in 1238, he declined to assent to the election of the monks of Coventry, in opposition to those of Lichfield, who gave preference to their own dean as successor to the deceased bishop. The see of Durham having become vacant shortly after by the death of Richard Poore, Nicholas de Farnham, chiefly on the persuasion of Grosseteste, Bishop of Lincoln, consented to the election of the monks of Durham. He was consecrated Bishop of Durham in 1241, in presence of the King and Queen with their court; he resigned his see in 1248-9, and retired into private life.[3]

To every anchorite in London the testator bequeathed a penny, and to the anchorite of Colemanschurch two furred garments (*pelicia*) with a rochet.

Stow,[4] under Coleman Street Ward, states that on the north side of St. Margaret's church, against the Old Jewry, was Coleman Street, so called of the first builder and owner thereof as also of Cole-church, or Colemanchurch, against the great Conduit in Cheap. He makes no mention of the anchorite there. Doubtless there were many recluses in the city of London. Stow relates that Henry III. granted to Katherine, late wife to William Hardell, 20 feet of land in length and breadth in Smithfield, next to the chapel of St. Bartholomew, "to build her a Recluse or Ankorage."[5] Of hermitages he notices that of St. James in the Wall, near Cripplegate, another near East Smithfield, and a third near the Hospital of St. Mary Rouncivall by Charing Cross. It must be noticed that although the distinction between anchorites and hermits is often not recognised, they are

[1] Nicolas, Testam. Vet., p. 226. See also p. 376.

[2] M. Paris, Hist. Angl. A.D. 1241, p. 549, edit. Wats, 1640.

[3] Godwin de Præs., p. 742.

[4] Survey of London, edit. 1633, p. 293.

[5] Ibid., p. 415. The hermitages above enumerated occur at pp. 339, 468, 495. For the anchorite and his house within the precincts of the abbey of Westminster, see "Memorials of Westminster Abbey," by Dean Stanley, 2nd edit., 1868, p. 394 *et seq.*

not to be confounded together; the latter were free to wander where they pleased, the anchorites were closed up, by sanction of the bishop of the diocese and with a solemn service. The respect, it might almost be said veneration, shown towards recluses, both male and female, is remarkable, and bequests to them occur often in wills. Their austere life and solemn dedication for the remainder of their days, when shut up in the anchorage or *clusorium*, gained for them a reputation of superior sanctity. Their prayers were in request by those who regarded the intercession of such holy men as of special virtue. Henry IV. founded a hermitage at the spot where he landed at Ravenspur in Yorkshire, in 1399, and Henry V. established a recluse near the Charter-house in London. The most remarkable evidence of the respect with which anchorites and hermits were regarded, and also of the great number of such ascetics in England is found in the will of Henry Lord Scrope, deceased in 1415. His partiality to anchorites seems unbounded; he bequeathed sums of money to many in the north of England and elsewhere by name. To every anchorite and recluse in London or York, or in the suburbs, he gave 6*s.* 8*d.* One was in special favour, as shown by the following bequest—"domino Johanni anachoritæ apud Westmonast' c. s. et j. par Pater Noster geinsid de gete, quibus utor." At the close of a very long list Lord Scrope makes the further bequest—"cuilibet anchoritæ et anchoritissæ qui potest leviter cognosci inter tres menses post obitum meum vj.s. viij.d.[6]

It will be noticed that the testator bequeathed ten marks to a certain person to make pilgrimage to the Holy Land on his behalf ("cruce signando pro me"), and there to make sojourn according to the prescribed usages. Such vicarious pilgrimages were by no means uncommon. There are many instances recorded of the gift or bequest of a sum of money by persons who, having taken the vow, were unable or unwilling to encounter the perilous fatigues of the holy voyage. Thomas Lord Berkeley, who died in 1321, having made a vow to go to the Holy Land, his son gave 100*l.* to Sir John Veel to go in his stead. Elizabeth de Burgh, Lady of Clare, by her will dated 1355, bequeathed "pur trover v. homes d'armes à la terre seinte c. marcs à bailler à ascun qe loil soit et covenable qe voudra enprendre la charge, si comune viage se face dedeins les sept anns prochains apres mon deces, de les despendre en la service Dieu et destruction de ses enemys."[7] Richard, Bishop of Chichester, who died in 1253, bequeathed fifty marks for the aid of the expedition to the Holy Land, to be paid to Robert Chandos, his brother, that he should go for him if it were his will, or to a substitute if he should decline to go.[8]

The vow of pilgrimage was not unfrequently redeemed, especially by the aged or infirm, on the condition of giving money to those who did perform the journey, or of contributing to the building or repair of churches and the like. It will suffice to cite a memorable instance of such absolution. Henry II., having taken the cross in 1188, sought eagerly to induce his nobles to join in the enterprise. Baldwin, Archbishop of Canterbury, was sent into Wales to preach the Crusade. Amongst the influential associates

[6] Rymer, vol. ix. p. 275. Much valuable information regarding mediæval asceticism and the various classes of devotees, may be found in a notice, of "The Ancren Riwle," Arch. Journ., vol. xi. p. 194.

[7] Royal Wills, p. 29.

[8] Nicolas, Testam. Vet., p. 762. See also the will of Sir Richard Arundel, ibid. p. 196; and other instances cited by Dr. Rock, Church of our Fathers, vol. iii. part i, p. 417.

in his journey the King's chaplain, the most popular of the clergy of St. David's, Giraldus de Barri, took a prominent position. The people were drawn in crowds by the eloquence of the prelate and the archdeacon: not less than three thousand persons hastened to take the cross. The death of the King in the following year, however, abated the zeal of the votaries, amongst whom were Giraldus himself and the Bishop of St. David's. The papal legate and cardinal had reached Dover on his departure from England; Giraldus, however, hastened to the coast, and obtained dispensation for the bishop and himself, with other persons who had taken vows of pilgrimage, the condition being enjoined that "de bonis divinitus sibi collatis Ierosolimam euntibus tribuant, et ad reparationem ecclesie Menevensis operam impendant et auxilium."[9]

A. W.

In nomine patris et filii et spiritus sancti, Ego, Ricardus de Elmham dictus, canonicus ecclesie Sancti Martini London, in vigilia Apostolorum Petri et Pauli anno Incarnationis Domini Millesimo ducentesimo vicesimo octavo, condidi testamentum meum. In primis, legavi Deo et Beate Marie et Beato Martino corpus meum cum palefrido meo ad operationem ecclesie, et quinque marcas quas Gilbertus de Aquila mihi debet, similiter ad operationem ejusdem ecclesie, et tres marcas pro capa qua teneor eidem, et capam meam de coro cum quodam superpelicio in vestiario ad opus supervenientium; et cuilibet vicario ejusdem ecclesie xii. denarios, et Sacriste et dormitorio xij. denarios, et Domino Petro iij. coclearia, et domino Herberto ciphum meum de argento, et domino Ricardo de Sancto Nicholao duo coclearia, et domino Thome de Sancto Botulpho duo coclearia, et Capelle Sancti Leonardi dimidiam marcam ad aliquem librum emendum, et superpelicium meum delicatum; et Ecclesie Sancti Alphegi j. marcam ad idem; et Ecclesie Omnium Sanctorum de Colmanescherche j. marcam ad idem, et unum gradale sine nota; et ecclesie mee de Westwelle antiphonarium meum in quaternis quod ligari debet, et unum psalterium cum eo; et cuidam crucesignando pro me decem marcas ad terram sanctam et ibidem moram faciendo secundum constitucionem crucesigmatorum; et ad duo annualia facienda sex libras; et Capellanis London' x. solidos; et cuilibet Anacorite London' j. denarium; et Anacorite de Colemanescherche duo pelicia cum uno rocheto; Ecclesie monacorum de Stratford melius coopertorium cum uno chalone et duobus lincellis et uno orilerium[1] ad opus hospitum; et Hospitali Sancti Bartholomei duo linceillis; Willielmo de Ripa Vicario meo psalterium meum glosatum, quod fidelitur intendet execucioni testamenti mei; Nicholao de Neville pulcram mappam meam; Roberto de Sancto Medardo librum meum de tractatu Pape Innocencii; Cecilie sorori mee, que manet apud Geistweit in Norfolk juxta Folesham, tres marcas, si vivat, vel pueris suis, si mortua sit;

[9] Gir. Cambr., de Rebus a se Gestis; in the collection of his works, edited by Mr. Brewer, vol. i. p. 84, where the Cardinal's letters of absolution, above mentioned, addressed to Archbishop Baldwin, are given at length. It appears that, unless papal dispensation was obtained, non-performance of a vow of pilgrimage to the Holy City was supposed to be attended with perils of sudden or violent death. The most full details regarding the Holy voyage, and peculiar usages connected with pilgrimage, are given by Fosbroke, British Monachism, p. 432—458. See the curious documents regarding redemption of vows of participation in the crusades, M. Paris, Auctarium, p. 225.

[1] A pillow, in French *Oreiller*. "Origliere, Uriglierium, Pulvinar." Ducange.

fratri Sawallo de Stratford cognato meo majorem ollam meam eneam et majorem ciphum meum de mazre; uxori Gilberti de Aquila unam cistam meam; Hospitali de Bureford ollam meam eneam et patellam similiter que sunt apud Westwelle. Et Osberto servienti meo de Westwelle j. marcam pro servicio suo; Gerrardo homini meo unum marcam pro servicio suo; vicariis Sancti Martini unam de mappis meis et unum manutergium in refectorio suo; Magistro Nicholao de Farnham medico Domini Regis meum portehors; Normanno filio Hugonis de Hertford' supertunicam de burneto et unum ciphum meum de mazre; Thome garcioni dimidiam marcam; Jeppe garcioni dimidiam marcam; ponti London' xl. denarios; [Fratribus de Halebuirg ad ornamenta sua; Fratribus minoribus infra Civitatem xl. solidos; et domui Sancte Marie de Hertforde xl. solidos;][1] et Monialibus de Anckerwic j. marcam.

Debita que debentur mihi Ricardo. Magister Willielmus Crespin xij. solidos pro capa fratris sui et panno garcionum; Hawisia de Langual' x. solidos de prestito; Herbertus Canonicus x. solidos; Willielmus de Sancto Martino canonicus dimidiam marcam; Ricardus Camerarius Sancti Albani duas marcas.

Et ego debeo sexaginta solidos de testamento Johannis de Plesset' assignatos ad emendum inde redditum in certo loco ad opus canonicorum de Dunmawe, ad pitanciam [v. solidos[2]] ipsis canonicis annuatim die obitus ipsius Johannis; et quia Prior nondum invenit redditum illum ad vendendum, ideo remansit solucio predictorum denariorum, que fiat ex quo redditus ille inventus fuerit ad vendendum. Item, debeo de eodem testamento circiter xx. solidos, ut credo. Predictum vero testamentum meum fiat de omnibus mobilibus meis, et exitibus prebende mee per annum et j. diem, et de x. marcis quas habere debeo de domibus meis a successore meo, per cartam Decani et Capituli quam inde habeo. Et ad testamentum meum exequendum et faciendum predictum Dominum Nicholaum de Neville, Herbertum Capellanum et Willielmum de Ripa executores meos constitui.

[1] The words bracketed are in another handwriting.

[2] This is interlined.

Proceedings at Meetings of the Royal Archaeological Institute.

July 5, 1867.

The Lord Talbot de Malahide, F.S.A., President, in the Chair.

Mr. Edward Smirke, Vice-Warden of the Stannaries, read an account of the discovery in 1837 of a Gold Cup in a barrow near the Cheese-wring in Cornwall. By gracious permission of the Queen and of H.R.H. the Duke of Cornwall, this precious relic, now preserved in the collection formed by the late Prince Consort in the Swiss Cottage at Osborne, was brought by Mr. Smirke for the inspection of the Institute. His memoir has been printed in this volume; p. 189, *ante*.

In moving a vote of special acknowledgment of the gracious condescension of her Majesty towards the Institute, the Chairman took occasion to observe, that the members at large would not fail to recognise with high gratification the repeated marks of favor shown by her Majesty and by the Prince of Wales towards a Society that had for a considerable period enjoyed the patronage and encouragement of the lamented Prince Consort.

This precious relic was subsequently exhibited at a meeting of the Society of Antiquaries, and has been described in their Proceedings, vol. iii., 2nd series, p. 517. It is there stated that similar vessels have been found in Scandinavia. Amongst other examples, differing, however, in their form and ornamentation, may be noticed two cups of gold, conical at the bottom, in the Copenhagen Museum: Worsaae, Afbildninger, figs. 215, 216. These are without handles. They are assigned to the Age of Bronze; a shallow bronze cup of similar fashion, and having a small handle, is there also given, fig. 218.

Mr. J. H. Parker, F.S.A., then gave the following report of the progress of excavations at Rome in the winter of 1866-67.

"On the Palatine hill additional chambers of the palace of the early Emperors have been excavated at the expense of the Pope, who keeps a number of men constantly employed there. These chambers were always subterranean and intended to be so, having no windows, although richly decorated with stucco ornament and painting of the first century of the Christian era. They were intended for use in the hot weather, and in Rome such an arrangement must have almost been a necessity. In the Roman palaces there were usually two stories underground, as may be seen in several instances. These excavations at the south end of the Palatine have also brought out more clearly the bath-chambers, reservoirs, and the conduit or *specus* in connection with the aqueduct of Nero, with additions of a later time, but all within the first century. The excavations by the French are more to the north. The palace excavated by them is of a later period,

and therefore less interesting; but this work is carried on more vigorously, and the thousands of loads of earth that they transport to the low ground under S. Balbina rapidly fill up that valley. Another excavation has been carried on at the expense of Signor Guidi, the proprietor of the vineyard or garden to the south and east of the Thermæ of Antoninus Caracalla, and within the original circuit of those Thermæ. This has brought to light the mosaic pavements of several chambers of a house of importance of the time of Hadrian, believed by some to have been the private house of that emperor, which, as we know from the Regionaries, was near this locality. Others, including Signor Guidi himself, suppose it to have been the house of Asinius Pollio, but without authority for giving it that name. The *Lares* or private chapel of the house has been found, with the altar, and paintings of the tutelar gods on the walls. The altar had been cased with marble, which had been carefully removed, and the whole structure had been filled up with earth intentionally, to make room for the great Thermæ, which are on a higher level. This fine house was therefore destroyed and the lower part filled up within a century after it was built; and this fact accounts for the perfect preservation of the part that remains. The excavations in the Trastevere were also begun by Signor Guidi; but when their importance was recognised by Signor Visconti, they were carried on by the Pope, otherwise they must have been filled up again. I wish to call attention to the plan proposed by Mr. Shakespear Wood, to form a fund for Historical Excavations in Rome, similar to that which has been formed for Palestine. The Historical Topography of Rome can never be properly indicated without further excavations carried on systematically under the direction of competent antiquaries, such as Signor Visconti. The Pope affords every encouragement to such works, and carries them on largely at his own expense; but funds are needed, and hitherto the researches have been carried out in a desultory manner, excepting those by the French, especially under the first Empire, when the Forum was excavated.

"I proceed to give an account of my own investigations in Rome during the last winter. I was chiefly occupied with two subjects—the Aqueducts, and the Catacombs, both of which I found extremely interesting, and both appeared to be imperfectly understood. The early works of the time of the Kings and the Republic have had very great influence on all the subsequent topography of Rome. The scarped cliffs of primitive Rome may still be seen on the margins of the hills, supported by walls of all periods, from the age of Romulus to our own time, but chiefly of the period of the early Empire, when a general repair of the old fortifications took place. The foss-ways of primitive Rome became the streets of the Empire, in general; but sometimes the streets were not required in the same direction, and they were filled up for other purposes. The old foss-ways were usually twenty feet deep, and the filling them up has caused many persons to imagine that the whole surface of Rome has been raised twenty feet; this, however, is a mistake, though a very common one. In the same manner it is clear that the bank on which the wall of the Empire was built must have existed in the time of the Republic, because the aqueducts were carried in it and upon it some centuries before that lofty wall was built. It appears probable that this bank was the outer *agger* of the Kings, as we have no account of any fortification of Rome in the time of the Republic. A double line of defence was usual in all early fortifications, the inner one being the scarped cliffs of the hills, the outer one the *agger* or bank with the wide and deep

foss round the city, with an enclosure between them, called in Rome the *Pomœrium*, because chiefly used for fruit gardens. This double line of defence is necessary to explain the thirty-seven gates of Pliny and the Regionaries; by including both lines places may readily be found for all the gates, otherwise it is impossible. That gates existed in the outer bank before the time of Pliny is evident from the existing remains and from history. Two of the gates now closed have brick work on stone work of an age before the time of Pliny, whilst three others have archways of earlier date, one being of the time of Augustus, another of Claudius, and a third of Drusus. At a short distance to the west of the arch of Drusus and the Porta di S. Sebastiano (within which it stands), is the Porta Ardeatina, long since closed, but preserved by being built up in the wall of Aurelian. This is of the finest brick-work of the first century, of the time of Nero or Titus. Such a gate proves the existence of a boundary of some sort existing in the time of Pliny, in the line of the present wall of the Empire, although that lofty wall was carried upon the old *agger* after his time. The probability is that this *agger* always had a *spina* in the middle of it, that is, a stone wall to support the earth, according to the usual practice of the Romans, as we know by their *aggeres* in Gaul and Britain. This bank or *agger* with the aqueducts on it led me to investigate the subject of the aqueducts. I found it, as usual, impossible to understand the existing remains by any modern books. I was therefore driven to take the text of Frontinus for my guide, and to compare it with the existing remains; and although this required much laborious investigation, it was extremely interesting, and the result satisfactory. Frontinus was the head of the *Aquarii*, that is of the officials charged with the care of the aqueducts in the time of Nerva and Trajan; he wrote his treatise, addressed to the Emperor, for the use of his successors in office and of his own assistants. It is much of the nature of an English "Blue-book," drawn up by the head of the department. No city was ever better supplied with water than Rome during the Empire, and I propose to follow the text of Frontinus, and to give some account of the existing remains in that order. I should mention that my son prepared an English translation of Frontinus for me, and he made a very probable conjecture, which proved to be true and important—namely, that the words "*Spem veterem*," which occur four times in Frontinus, mean the old *Specus* and not the old Temple of *Spes*, as explained by modern writers. *Spem* is doubtless a contraction of *Specum*. Careful examination of the existing remains, compared with the context, satisfied me that the suggestion was a very happy one. This gave a plain and clear sense to every passage, which, by the old explanation, could only be interpreted by a forced construction, with many conjectures and assumptions. It had been assumed that the whole of the eastern side of Rome was called after the imaginary temple of Hope, as it was seen that Frontinus mentions a "*Spes vetus*" at the north, and another at the south, on this side of Rome.

"The ruin of a temple at the Porta Maggiore, excavated about twenty years ago, was assumed to be that of the old temple of *Spes*, although the only inscription found there relates to Hercules and not to Hope. Canina wrote a volume on the subject, with a map of 'the district of Old *Spes*,' which is all grounded on ingenious conjectures. It was natural that the old subterraneous *Specus* or tunnel for the aqueduct within the walls should be used again for the later aqueducts, when convenient for their surplus

water, and this is what Frontinus specially mentions in one instance; in another the junction of the Augustan branch with the older Appian aqueduct takes place at the Gemellæ, or 'The Twins,' in the old *Specus*—'*ad Spem veterem.*' This is a far more natural interpretation than at the temple of old *Spes*. He also observes that this junction was '*post hortos Pallantianos*,' which has been misconstrued into another temple dedicated to Pallas, or the garden of the freedman Pallas. It is in fact 'at the Palace Gardens,' that is by the side of the gardens of the Sessorian palace, the usual residence of the imperial family, now the Monastery of S. Croce, where the old *specus* still remains running along the bank on the northern side of these gardens, and further along in an *agger* to the Lateran and the Cælian hill, and so to the great reservoirs near the arch of Dolabella at the west end of that hill. Along this old tunnel or *specus* I have walked for more than half a mile, from the Sessorium close to the Porta Maggiore, to the Lateran, and I might have gone on to the arch of Dolabella if I had not been tired. I had afterwards the satisfaction of having our interpretation of this passage confirmed by the only two ancient manuscripts of Frontinus that are known to exist. The MS. in the Vatican Library was kindly examined for me by Cardinal Pitra, and he considered that it rather confirmed our view than otherwise; in one passage decidedly, in the others more doubtfully. The other MS. is in the library of the Monastery of Monte Cassino, and was examined at my request by the librarian. He sent me a certificate that in every instance in the MS. the word is written SPĒ, with a mark of contraction over the E. If there had been only one more letter it is not probable that any contraction would be used. This MS. is the best that is extant, earlier by some centuries than the MS. in the Vatican, which indeed is believed to be a copy from it.

"Frontinus states in his fourth article, in the introduction to his treatise, that for 441 years after the foundation of the city the inhabitants were content with the water of the Tiber, and with that from wells or reservoirs of rain water, and from springs. Of these reservoirs a curious example remains tolerably perfect at the north end of the Palatine hill, behind the wall of Romulus; it is a cave, and probably part of it is natural, but enlarged by excavating a soft bed of tufa, or of sand between two hard beds of tufa, which, with the help of a thin coat of clay-cement, made an excellent reservoir, into which three conduits or '*specus*' ran in different directions from the surface of the hill above. The reservoir is about six feet deep and about the same in width, but of considerable length. In the vault of rock above are small circular funnel-shaped openings for letting a small vessel down to draw up water. This arrangement is uncommon; the only other instance I have been able to hear of is at Alba Longa, where there is a cave-cistern with similar funnel-shaped openings through the roof. This seems very like a confirmation of the truth of Livy's history, that the Romans were a colony from Alba Longa.

"Frontinus states also that some of the springs were still in use after the aqueducts were made, and were considered as sacred on account of their salubrious or medicinal qualities; such as those of the Camenæ, of Apollo, and of Juturna. This mention of the medicinal properties and supposed sacredness of these springs has enabled me to identify them. That of the Camænæ is at the foot of the Cælian, at the south-west corner, a short distance outside the Porta Capena, and is probably the same as that of Egeria, another clear spring at a considerable depth near to it. It is a beautiful, clear

spring, at a considerable depth, and the proprietor of the vineyard assured me that he had frequently drunk of it with beneficial effect, and that the qualities were much the same as those of Cheltenham waters. That of Apollo is a powerful, gushing spring, also at a considerable depth in the Esquiline, near the Torre dei Conti, now entirely built over and concealed from view. That of Juturna is particularly interesting; it is under the north-east corner of the Palatine, in front of the church of S. Anastasia, and is also called the Acqua Argentina, because a part of it used to run through the silversmiths' quarter of the Forum, under the arch of Septimus Severus, which bears an inscription stating that it was made by the silversmiths. In the vestry of the adjoining church of S. Giorgio in Velabro is another inscription recording the miraculous powers of this water, which are piously attributed to the merit of a Christian saint. The course of the stream is curious, and valuable in illustration of the history of Rome. It rises in a cave partly natural but chiefly covered with a vault, and the entrance is down a well in the street. My friends would not allow me to go down, as they said it was too damp and dangerous, and that there was not room to stand upright; but I stood at the mouth while my two artists descended and made sketches and a plan; they traced the course with the help of the *Aquarius* who had charge of it, and I am sure that I can thoroughly depend upon them. It gushes out with considerable force, and follows the line of the old zig-zag road, now buried to the depth of about twenty feet as usual; it runs along in a *specus* by the side of the old way under the present road, passing the round church of S. Theodora to the water trough at the opposite end of the Palatine near the Forum Romanum. This water is supplied from it, and this is just the site of the old gulf of Juturna or Curtius. It then turns at a sharp angle following the zig-zag road down to the church of S. George and the arch of Janus, where the old pavement of the road remains, twenty feet below the level of the present road. It then goes on a little further, and after passing through an ancient lavatory, still in use, falls into the Cloaca Maxima, and so into the Tiber through the well-known triple concentric arch of Camillus, about 100 yards above the earlier opening in the Pulchrum Littus, through which the Acqua Crabra still runs. There are four openings into the Tiber, all of which claim to be mouths of the Cloaca Maxima; they are of different periods, but appear to be all united by a canal at the back of the wall, having an outwork, so that no rise in the water of the river can prevent the water in the drain from finding an exit at the lowest mouth, which runs into the stream protected by a projection, except in high floods, when of course the whole is under water together, but this is of rare occurrence. The earliest aqueduct was made by Appius Claudius Crassus, the Censor, who also made the Via Appia from the Porta Capena to the city of Capua; the source of the water was in the Lucullan fields, to the left of the Via Prænestina, between seven and eight miles from the city, and it was brought to the Salaria or Salt Wharf, at the Porta Trigemina. The course was entirely underground, excepting near the Porta Capena, over which it passed, and where it was for sixty paces above ground, partly on a substructure and partly upon arches. The Augustan branch was added to this at the Gemellæ in the old *specus*, as before mentioned. Its course through the Campagna, being entirely underground, is very difficult to trace, and I have not been able to satisfy myself about it, though I have repeatedly tried to trace it. I can only state that on the Via Labicana, near the mausoleum of S.

Helena, about three miles from Rome, there is an old pyramid which appears to have been a respirator to a subterranean aqueduct, and from the structure must probably have belonged to this; and at about a mile from the Porta Maggiore, in the bank of the railway, I have been assured that a large, ancient *specus* was found, at a considerable depth, much deeper than any other aqueduct; and this is expressly said by Frontinus to have been the lowest. Within the city I have been more fortunate. On the eastern side of the Porta Capena, in a gardener's cottage, I have found one of the piers of an aqueduct, built of the large stones in the style of the Kings, and in a line with this a brick pier of the time of Trajan. On the other side of the Via Appia, and on the site of the Porta Capena, are two other piers of Trajan's period, all in the same line, passing close to the north of the ruins of the Piscina Publica, in the direction of the Salaria, Also under the Aventine hill, near the Tiber, the Porta Trigemina and the Salaria, I have found a cave reservoir very similar to that of Romulus, with three conduits or '*specus*' running into it, and through one of these water still flows into the Tiber, probably from a spring in the Aventine itself. One of the others comes down with a rapid slope from the hill above, as from a *specus* which has been traced on the edge of the cliff in the garden of the monastery of S. Sabina, where there is a zig-zag path down the face of the cliff, supposed to have been the Clivus Publicii of Frontinus, as it terminates at this cave."

Some discussion followed Mr. Parker's lecture, Canon Rock considering some of the theories advanced to be debateable; but the great value, interest, and importance of Mr. Parker's investigations were admitted on all sides, and a most cordial vote of thanks was passed to him.

At the close of the meeting, John Loft, Esq., Mayor of Kingston-upon-Hull, spoke of the great interest which the forthcoming meeting of the Institute in that town had excited among the inhabitants, and assured the members that a most hearty welcome awaited them.

Antiquities and Works of Art Exhibited.

By General Moore.—A gold ornament, a specimen of the curious class of relics found frequently in Ireland, and designated, by Sir W. R. Wilde, in his Catalogue of the Antiquities of Gold in the museum of the Royal Irish Academy, "Mammillary fibulæ." These objects are of great diversity in size; they have occurred occasionally in England and in France. By Col. Vallencey they were called "double-headed pateræ." Many conjectures have been proposed in regard to their use, and the mysterious import of their decoration. These so-called fibulæ consist of two cup-shaped or scyphate discs, united by a handle. The specimen exhibited was found, in 1842, in a bog, near Mullingar; it was brought at once to General Moore by the finder. It measures $4\frac{3}{4}$ in. across the cups, each of these measuring $2\frac{1}{8}$ inches in diameter. The margin of each is worked with three slight grooves, or engraved lines, on the inside; towards the external edges of the cups these lines are partly effaced, as if worn away by friction. The weight is 4 oz. 16 dwt. 6 gr., the gold pure; the surface shows traces of hammering. Several varieties of these "mammillary fibulæ" have been figured by Sir W. R. Wilde; the largest existing specimen known, found in co. Roscommon, measuring 11 in. across the cups, which are 5 in. in

diameter; the weight is 16 oz. 17 dwt.[1] Another, now destroyed, found in co. Meath, weighed upwards of 40 oz. A portion of an ornament of the same class, and of unusually large dimensions, is preserved in Payne Knight's collection at the British Museum. It was found in Cornwall, near the Lizard, and is figured in this journal, p. 202, *ante*. A perfect specimen (now, unfortunately, lost), in size and fashion resembling that in General Moore's collection, was found at Swinton Park, Yorkshire, and is figured, also, in this journal, vol. vi. p. 61. Two similar relics were found, as stated by Gough, near Ripon; and an example found in an urn in Scotland is figured in the Archæologia, vol. ii. p. 40. M. de Caumont mentions the occasional discovery of such golden objects in France, Cours d'Antiqu. Ere Celtique, p. 246, pl. x.

By Mr. JAMES CARTER.—An implement formed of the horn of the red deer; a relic of very great rarity in England, if not unique: it was found in the Cambridgeshire Fens. Examples in the museums at Hanover and Schwerin have been given in the "Horæ Ferales." A gold ornament, enriched with *cloisonné* enamel, found at Cambridge. These, with other valuable relics in Mr. Carter's possession, will be more fully noticed and figured hereafter.

Mr. W. PONTING, of Worcester, communicated an account of a discovery of Saxon interments at Upton Snodsbury, about five miles west of that city. Several relics that had been brought to light were also brought for exhibition. In addition to the local Archæological Society and the Worcestershire Natural History Society, of which the late Sir C. Hastings was for some years the efficient President, there has been established a Field Club of workers in various departments of science. A few of the members devote attention to the geology of the "Drift." In order to aid this object, Mr. Prestwich sent some flint implements for the information of the workmen, and he paid a visit with Mr. Ponting to Upton Snodsbury, where a gravel pit was then being worked. They were so fortunate as to obtain a tooth of the *Elephas primigenius*. In consequence of this and subsequent discoveries, the Field Club visited the gravel bed. On the previous day, two large perforated crystals, supposed to be whorls for spindles, had been thrown out; unfortunately, they were regarded by the visitors as modern, and no further interest was excited. In the spring of 1866 Mr. Ponting again visited the spot. He found that the gravel-pit had been abandoned, and a new pit opened near it, He was informed by the foreman that some pieces of iron, and other little things of no use, had been found; the former proved to be spear-heads. On further inquiry, he ascertained that numerous beads had been brought to light. These Mr. Ponting succeeded in collecting from the cottagers, and fortunately recovered almost the whole of the necklace, composed of about 130 beads of amber; four small beads only remaining in possession of the Rev. H. O'Donnell, Vicar of the parish. A large bead, probably the central ornament, was of earthenware, or coarse vitrified paste, striped with colours, and similar to objects that have occurred frequently in Saxon deposits. A broad, two-edged, iron sword, measuring about 3 ft. in length, was afterwards secured through Mr. Ponting's persevering negociations; he also obtained from the most intelligent of the workmen three bronze brooches, of the usual cruciform type; also a pair, of scyphate form, ornamented with concentric circles. From this man, on

[1] Catal. Antiqu. of Gold, Mus. Roy. Irish Acad., p. 57.

whose testimony, as Mr. Ponting was assured by the Rev. H. M. Sherwood, Vicar of White Ladies, Aston, reliance might be placed, the following particulars were obtained. Some weeks previously the gravel-pit first mentioned was closed; the workmen came upon a trench about 30 ft. in length, 6 ft. deep, and 3 to 4 ft. wide, in which many relics were found; as they were not aware of their value, these objects were taken with the material for road-making, and thus irrecoverably lost. The amber necklace and brooches were not found in this trench; they lay apart, at a short distance. The site, as Mr. Ponting observed, is on a bank having a warm south-western aspect—a spot that would have been chosen by the early settler: close beneath is a brook, called Crowle Brook, a tributary of the Avon, and this would doubtless have been an attraction to those who here took up their abode. The spot was in the centre of the Forest of Feckenham, which covered nearly one-third of Worcestershire; whether first cleared in British times or by the Saxons, it may now be impracticable to determine. In the neighbouring parish of Crowle, however, remains were found, supposed to be Danish. (Nash, Hist. Worc. vol. i. p. 281; Allies, Antiqu. Worc. p. 94.) It is much to be desired that the evidence of Saxon occupation, satisfactorily established by Mr. Ponting, may lead to further discoveries, and that possibly vestiges of a much earlier period may hereafter be brought to light. Having been requested to obtain information in regard to the geological character of the bed of gravel, he had visited the spot with the Rev. W. S. Symonds, who is fully conversant with the geology of the district, and who has given the following opinion concerning the relics:—"I have no hesitation in saying that they came from an ancient river gravel (of the age of the low-level river gravels of Prestwich), on the banks of the small stream which now flows into the Avon from Upton Snodsbury. These low-level gravels of the Avon district are very rich in the remains of the extinct mammalia, and are above the line of the river floods of present times."

The interesting objects in Mr. Ponting's possession are undoubtedly of the Saxon age, resembling those found in cemeteries in Gloucestershire, Cambridgeshire, and other parts of England. The supposed spindle-whorls are, it is believed, crystals of quartz in their natural state, but perforated for suspension. They have occurred repeatedly with relics of the Saxon period; the largest hitherto described was found in gravel at Myton near Warwick, and is figured in this journal, vol. ix. p. 179; it was accompanied by a large cruciform brooch, and measures about $2\frac{1}{2}$ in. in diameter.[2] Other examples of the uncut perforated crystal are there also noticed. Amongst numerous beads of amber, vitreous paste, fluor spar, and other materials found in a cemetery near Little Wilbraham by the late Lord Braybrook, many large crystals of the like description occurred. (Saxon Obsequies, pl. 22.) The specimens obtained by Mr. Ponting, to whose kindness we are indebted for photographs and sketches of these relics, measure about $1\frac{3}{4}$ in. in diameter. The iron spear-heads, six in number, are of various dimensions, with sockets open lengthwise; in one of them part of the wooden shaft remained. Besides the amber necklace, above noticed, there were about 20 beads found near it, with an object of the same material perforated with three holes, probably an amulet; these relics may have

[2] This fine brooch is figured also in Akerman's Pagan Saxondom, pl. xx. See one found in Gloucestershire, Wylie's Fairford Graves, p. 15, pl. iv. fig. i.

accompanied a deposit, apart from the first. The largest of the cruciform brooches retains traces of gilding. Mr. Robert Berkeley, jun., as we are informed by Mr. Ponting, has obtained from the same gravel-bed an iron sword, and a large bead of glass, beautifully striated. It is probable that careful research would bring to light numerous other relics of the Saxon occupants.

It may deserve notice, in regard to the interesting discovery at Upton Snodsbury, that Mr. Allies, in his notices of Worcestershire Folk-lore, gives a tale of a countryman who was attracted by an outcry in a neighbouring field, and found there a fairy, by whom he was taken down into a cave, and hospitably entertained. (Allies, Antiq. of Worcestershire, p. 419.) It is not undeserving of notice that in several instances, according to popular tradition, heathen cemeteries and grave-mounds have been regarded as haunted, strange subterraneous noises having, as alleged, been heard, and passengers accosted or pursued by the unearthly occupants of the tomb. The recent discovery related by Mr. Ponting may possibly suggest the cause of the popular story at Upton Snodsbury; it may have been connected, as in other places, with a certain dim tradition of the ancient interments.[3]

By Mr. J. Fergusson.—Photographs of sculptured remains from the circular enclosure of a large Buddhist Temple, or Tope, situated at Amravati, near the mouth of the river Kistna, in the Madras Presidency. They were taken from marbles, sent to this country, some years ago, by Sir Walter Elliott. The chief features of this Tope are two concentric enclosures, measuring 195 ft. and 165 ft. in diameter respectively; the outer enclosure consisting of monolithic pillars, 9 ft. in height, with top and bottom rails, the whole richly sculptured with subjects from the life of Buddha or local history. Mr. Fergusson called attention to these sculptures as being of a higher class than anything found elsewhere in India, and as showing the influence of Greek or Bactrian art upon that of the Hindús at the commencement of the fourth century of our era. He has given, in his Handbook of Architecture, vol. i, p. 13, an account and ground-plan of the Tope, now known as Dipal-dinna, or Mount of Light.

By Mr. J. Yates.—Drawings and engravings illustrative of remains of ecclesiastical architecture in Yorkshire, and especially of the beautiful collegiate church of Howden, a fine example of the Decorated Period, that had been one of the leading objects of interest during the late meeting of the Institute at Hull.

By the Rev. R. B. Oliver.—Drawing of a mural painting, brought to light in Whitwell Church, Isle of Wight. Some account of the church has been given by the Rev. E. Venables in this journal, vol. xxii. p. 79.

By Mr. Henderson, F.S.A.—A pair of pistols, of Oriental workmanship, encased in silver filagree, gilded, of very elaborate design. A Lahore knife, with a handle of rock crystal, damascened with representations of storks and flowers. Indian dagger, damascened, in a sheath covered with green velvet; another dagger, the blade damascened with gold; and a Kuttah dagger, a weapon of rare occurrence, the blade partially ribbed with raised cross-bars.

By Mr. B. R. Green.—A series of sketches of architectural remains, and of ruins of ecclesiastical structures in England and Scotland.

[3] See a singular legend regarding a tumulus in East Yorkshire, Wright's Archæological Essays, vol. i. p. 32.

By Mr. COCKRAN.—A bronze medallion of an imperial head, found on the property of Mr. W. Fairholme, near Melrose, Roxburghshire. Many vestiges of Roman occupation have occurred in that part of Scotland, and fresh evidences have recently been brought to light during the construction of the Hawick Railway through the Vale of Melrose. (Wilson, Prehistoric Annals, vol. ii. p. 50.) The antique character of the medallion exhibited was, however, considered doubtful; it may, probably, be a cinque-cento cast, or reproduction of a relic of Roman art.

By the Rev. C. E. KENNAWAY.—A leaden token of rectangular form, here figured, same size as the original; a profile view is also given, showing the thickness. It is a specimen of a large collection, found lately in a small concealed compartment, in a roughly-wrought old chest in Bloxham church, Oxfordshire. The purpose for which these tokens had been used has not been ascertained. Several other specimens were brought by Mr. C. Faulkner, F.S.A., who stated that the chest stands near the Thornicroft aisle; it is a receptacle for mats and cushions, or any rubbish. At one end inside a kind of till is partitioned off, 7½ in. in width, and having a false bottom that turns on wooden pivots. The vicar's children accidentally opened this hidden receptacle, and found 395 of the leaden objects. They are all nearly of the same size, and have been produced by one and the same stamp, as appears by trifling irregularities in the device, uniformly found on all of them. The stamp, mostly struck rather towards the left side of the little tablet, is a heart charged with a circle, enclosing a mullet pierced, as shown in the woodcut. We are not aware that similar objects have been described; they are doubtless mediæval tokens, *merelli*, usually of lead, and thence called *plumbi*. In many churches they were given as tokens of attendance at certain services (*in presentiæ signum*), by canons, chaplains, or others, and brought by them weekly, or at stated intervals, to be exchanged for the payments to which each ecclesiastic had become entitled respectively. See Ducange, *v. Merallus*, and *Plumbus*. In the reformed churches tokens of lead were distributed to such persons as were to be admitted to the Holy Communion. Numerous specimens are preserved in the Museum of the Antiquaries of Scotland, in whose Proceedings, vol. vi., p. 437, a large collection—square, oblong, round, and heart-shaped—are described. These are of the seventeenth and eighteenth centuries.

ANNUAL MEETING AT KINGSTON-UPON-HULL.

[Tuesday, July 30, to August 6.]

OWING to the lateness of Parliamentary business in the Metropolis, and the sittings of royal commissions, the attendance of members of the Institute at the Hull Meeting was considerably below the average. It seemed, however, as though this gave an additional claim to the courtesy and attention of the inhabitants of the town on behalf of those who were present, for nothing could exceed the kindness with which they were everywhere met.

The Inaugural Meeting was held in the "Mayor's Parlour," a large and elegantly fitted-up room in the new and handsome town-hall. A short time before noon, the members of the Corporation, with the town-clerk, and other officials, arrived, and, on robing, waited the arrival of the more distinguished visitors and members of the Institute in the mayor's private room. Among those here assembled were His Grace the Archbishop of York, the Bishop of Lincoln, Lord Talbot de Malahide, the Hon. and Rev. the Dean of York, the Ven. Archdeacon Long, the Ven. Archdeacon Trollope, Sir Stephen R. Glynne, Bart, Christopher Sykes, Esq., M.P., H. Silvester, Esq., Mayor of Beverley, the Rev. Canon Paget, the Rev. Canon Tewson, the Rev. Canon Brooke, Lieut. Col. Pease, Dr. Kelburne King, Mr. A. K. Rollit, &c.

Having opened the meeting in a short speech, the Mayor of Hull (John Loft, Esq)., called upon the Town Clerk to read the address voted by the Corporation of Hull to the Institute.

R. Wells, Esq. (the Town Clerk) then read the following Address:—

"To the Right Honourable the Lord Talbot de Malahide, the President, and the Members of the Royal Archaeological Society of Great Britain and Ireland.

"We, the Mayor, aldermen, and burgesses of the borough of Kingston-upon-Hull in common council assembled, have great pleasure in welcoming your lordship and the members of your Institute to this ancient borough and seaport on their annual meeting in this year.

"We feel it to be an honour conferred upon us that you have selected this to be your place of meeting; and although this town during the last century has lost many of its important objects of archæological interest, by the necessity for their removal to provide for the constantly increasing wants of a great emporium of shipping and commerce, yet still it possesses some magnificent, and other interesting objects of antiquity worthy of examination by your society; and whilst we, in our position, can afford to make this place a convenient centre for proceeding to the examination of many important ancient buildings and other relics of mediæval and remote ages on both sides of the Humber, the Hull, and the Ouse, we feel glad to have the opportunity of assisting in the programme prepared by you in giving good effect to the exertions of your Committee in this your annual meeting.

"With every good wish for the continued prosperity of your valuable Institution, we gladly avail ourselves of this opportunity of promoting its objects in the borough and the adjacent districts of Yorkshire and Lincolnshire.

"Given under our common seal this 29th day of July, 1867.

"(Signed) JOHN LOFT, Mayor."

The Mayor said it was with the most sincere pleasure that he presented to his Lordship, the President of the Institute, the Address which had just been read by the Town Clerk, and which had been unanimously voted by the Town Council. Not only did he experience sincere pleasure in presenting the address on behalf of the Corporation; but he also felt that it was a very high honour that the Institute had accepted the invitation to hold its annual meeting in their ancient borough. And not only did the Town Council welcome the Institute, but he might safely say that the whole of his fellow townspeople did the same. He felt that he should very unworthily fill the position which had been entrusted to

him if he attempted in any way to assume the character of an antiquary; but, associated as he had been with gentlemen whose knowledge on such subjects was far greater than his own, they had endeavoured to produce a programme which should give satisfaction. The local Committee had endeavoured to introduce into the programme not only such objects of interest as were contained in the borough itself, but had comprehended those of the surrounding neighbourhood, the examination of which he felt sure would conduce very considerably to the gratification and interest of the meeting. The Mayor then congratulated the Institute on having selected as their President of the meeting one who was so highly esteemed, and he might say so sincerely beloved, not only by every individual who had the pleasure of his acquaintance, but by every one who knew him by name as the archbishop of the diocese. (Applause.) They might consider themselves extremely fortunate that the Archaeological Institute had elected his Grace to that position, because he might safely say that no predecessor of his Grace ever received a more hearty welcome than he had met with on different occasions. He might also say that he believed his Grace had honoured them with his presence to a greater extent than any of his predecessors had done. (Applause.) And therefore he (the Mayor) considered that a very high honour had been bestowed upon Hull generally by the Institute's acceptance of the invitation of the Corporation, and by their electing the Archbishop to preside over them. He would now ask Lord Talbot de Malahide, as President of the Archaeological Institute, to accept the address of the Corporation of Hull.

Lord Talbot de Malahide, on rising, was received with great applause. On behalf of the Royal Archæological Institute, he had the greatest pleasure in tendering their best thanks for the manner in which they had presented to them that beautiful address. To the members of the Institute it was always a very cheering thought that they were supported in their endeavours to illustrate the antiquities of their country by ancient bodies which had existed, he might say, from the most distant ages. Their objects might be such that they had not been participated in to any extent by a considerable number of those who honoured them with their presence on that occasion. But he hoped and trusted that the sample they could give them of their proceedings, and the manner in which they treated the subjects under their consideration, would induce them further to devote themselves to them; for he need not tell them that their study was not the mere examination of scrolls and other objects with the eye of the *virtuoso*, but it was for the purpose of deriving valuable information as to the habits, the feelings, and history—the social history particularly—of the people of distant ages. In an ancient country like ours, which possessed so many glories, a country which had passed through so many revolutions, which had seen so many waves of immigration pass over it, it was a most interesting and instructive study to trace the effects of those revolutions, and to examine the remains which still appeared upon the surface. (Applause.) So far as he was personally concerned, it had been a great pleasure to him to be able to visit this important portion of the county of York. He was sorry to say that it was the first opportunity he had had of doing so. He was told that there were many interesting objects within the town, and many others within their reach. They all knew the glories of Beverley, and there were very few counties which possessed such treasures in the beauty and in the interest attaching to the parish churches, which was one of the

glories of England. In no country in the world, however great and grand their magnificent cathedrals were—and in France, Germany, and Spain there were glorious cathedrals—in no other country could they see anything to be compared to the general character of our parochial church architecture. (Applause.) There were other matters well worthy of their consideration, which, he trusted, would derive considerable impetus from that meeting. Their object was not only to examine churches and castles and buildings of remote antiquity, but also to gather what gleanings they could in history, and particularly in the social history, of this country. And although the borough of Kingston-upon-Hull might not possess a great number of memorials of ancient buildings, he doubted not that in its records and its history were to be found most valuable and interesting illustrations of times past. There was no more interesting study for an antiquary than the investigation of the commercial antiquities of the country, and he trusted that they would receive valuable information as to the history of the corporation of that borough, the history of its commercial usages, and the state of its society in mediæval times. And here he might say that antiquaries had it in their own power, he felt convinced, to be of the greatest possible service even to the present generation of Englishmen. In mediæval times, although industry was not so extensive, and commerce was small compared to what it was now, and although it was then fettered in various ways, there were many institutions, which, he had no doubt, if adopted in the present day, might be found of the greatest practical benefit. He was very much struck on reading a book by Louis Blanc, who, as they were aware, was one of the most thorough-going advocates for the great social changes in the frame of society, particularly as related to France. The author expressed his regret that the great French revolution had swept away some of the ancient usages; that the guilds and the commercial fraternities were swept away, which had existed in France, as well as in other countries, to that period. And here it was a subject well worthy of the consideration not only of the antiquary but of the statesman, whether it would be possible in some way to form guilds on the mediæval model which would be a medium of promoting a good feeling between the employer and the employed, and so preventing the abuse of strikes and of combinations. (Applause.) He was satisfied that a person of ability and perseverance who devoted his mind to the subject might strike out something that would be of essential and permanent value to the institutions of the country. (Applause.) He had now the pleasing duty of resigning the post which he at present held as President of the Institute into much worthier hands. He had the honour of proposing that His Grace the Archbishop of York take the chair at that and the ensuing meetings. (Applause.) They all knew the great ability possessed by that noble prelate, and they knew the great zeal which he exercised in promoting every great and useful object. He feared that perhaps His Grace might have thought it unreasonable on their part to add to his duties, but he trusted that, instead of its adding to his labours, he would find some little relaxation in the exercise of his duty as President. (Hear, hear, and Applause.) The Institute felt it a great honour to have such a president, a man who took so prominent a part in the ecclesiastical government of this district, and who was so much respected for his efforts in all public works.

Christopher Sykes, Esq., M.P., seconded the motion in a few words. The motion was then put to the meeting, and carried unanimously.

His Grace the Archbishop of York then took the position of President of the Meeting, and read his Inaugural Address (printed at p. 83 of this volume).

After the applause with which this address was greeted had subsided, a call was made for the Bishop of Lincoln.

His Lordship remarked that he had attended the meeting partly to learn what he felt himself ignorant of, and partly as in duty and feeling bound to sustain, so far as the fact of his presence could, his most reverend brother. But he hoped rather to have been permitted to fulfil the quiet position of a corbel-head, instead of occupying that of a grim gurgoyle. His Grace the Archbishop had disclaimed any knowledge of archæology, a disclaimer which he thought they ought to feel that he had neutralised by his Address. He, too, must also disclaim any such knowledge; but at the same time they might allow him to add that great ignorance was quite consistent with great interest in archæology. Anything that led them to know more of their fellow creatures, that brought them more face to face and heart to heart with them, if divided by distance or by length of time, was a great advantage. It enabled them to do their duty better, and he for one thought that, to use political language, which was so very fashionable just now, as foreign travel extended their sympathies laterally, archæology extended them vertically. He said "Archæology" because "History" in its stately march overlooked those minor details of domestic life which made them feel that their ancestors were their brethren. Archæology took them not only to their churches and castles, but to their cottages and homes. Besides, reverence for age was a virtue, he believed, not only of the individual and of the country, but of the age in which they lived. He did not know whether they would be right in inferring from what they read now-a-days that the youth of the present time treated their governors not with the greatest respect; but he was sure that the social spirit of the nineteenth century was very apt to undervalue the intellectual powers and attainments of what they were pleased to call the "dark ages." Some in these days of steam engines, railroads, and electric telegraphs, would tell them that the dark ages were times of intellectual gloom in which the human intellect was depressed, and from which they must look for nothing great or beautiful or noble. His Grace must well know that in those days there were men of intellectual stature who not only overstepped their own contemporaries, but who in the present day would be a shoulder above many a popular writer and many a deep thinker. He knew the acuteness and the intellectual power of such men as Anselm, Scotus, and others among the Schoolmen, who would hold their own in an intellectual combat with men like Paine, Hamilton, or Mill. But their deeds were locked up in stone, of which few cared, as His Grace had cared, to unclasp the rusty lock, or to disturb the venerable dust which had gathered over them. But the architects of the middle ages, the structural engineers, the masons, could not thus be overlooked. They saw and admired their works, and admitted the inferiority of the present age; and every one must admit that not only did they possess a knowledge of structural mechanics which we had scarcely surpassed, but that they had also that genius which could combine the beautiful with the sublime, and while elaborating the minutest details they never lost sight of the general effect. All must admit *that*, who had studied the elegance of Beverley, the magnificence of our own imperial York, or the graceful grandeur

of his own queenly Lincoln. Those buildings rebuked the art of the present day by their surprising grandeur; and in that respect they might learn a lesson of humility from archæology. Indeed, he was not sure whether the danger was not rather the other way, and that, comparing ourselves with them in matters of structural art, they had not sunk too much into the practice of imitating rather than emulating. Here he felt that he was getting out of his depth. At the same time it did sometimes occur to him, that when they recollected how completly their ancestors seemed to have kept in view the great, the final end of the buildings which they were erecting, and how beauty was there, with utility moulded in the matrix of taste, it did sometimes occur to him, that if at the present day those great architects had to solve the problem of limited means, to provide in our populous towns for the greatest numbers to worship Almighty God, and to bring the largest numbers of human beings within the reach of a single human voice, they would perhaps hardly have done it by confining themselves to a style the very essentials of which required that there should be no galleries, and which, therefore, where those conditions had to be complied with, produced usually a *minimum* of effect with a *maximum* of expenditure. He knew not how that might be, but he thought they would have endeavoured to solve the problem. He did not know whether in the middle ages there was such a science as architectural acoustics, but they observed frequently the great resonant powers of those great buildings, except where they had been disfigured by modern additions; and it was much more easy to make their voice heard in the large Gothic buildings of the middle ages than in nine out of ten of the edifices of the present day. He knew not whether the laws of proportion, the laws of form, or laws resulting from the combination of both, governed those effects. He did not think the architects of the present day pretended they had such a science now, or that they understood those laws. He would be a great benefactor to the science of architecture, and to the church of this day, who would devote some labour and study to ascertain, by a careful inspection of ancient edifices, whether there were certain conditions, certain proportions and shapes which would enable the human voice to resound through a greater distance; and would save us from the reproach of having built within our own time not only picture galleries in which we could not see, but senatorial halls and churches in which we could not hear.

There was one debt, he felt, owing to archæology—the great impulse it had given to the restoration of churches. It had not only hindered a great deal of mischief, but it had encouraged a great deal of good; and he might say, the very fact of such meetings as that must have a direct tendency to encourage church restoration. They were going to inspect some of the churches in the neighbourhood. He did not know the state of those churches, but in his own diocese the simple fact of a large number of ladies and gentlemen visiting churches which the parish thought nothing of before, which they treated with very little regard or respect, led them for the first time to think that there must be something worth knowing there, and to regard their church as a treasure hitherto undiscovered. From that time forth the work of restoration became easy. The people took pride in their church, and they spared henceforth neither labour nor cost to make it what it ought to be. Knowing from experience that it was very seldom indeed that churches well restored and properly fitted

for the worship of Almighty God did not produce those fruits in a larger and more regular, and apparently more devout, congregation, he felt it was only right to recognise those services which archæology had rendered to the cause of religion and to the church. (Applause.)

The ven. Archdeacon Long would not pretend to make any remarks upon the valuable objects which the Institute had in view, but he felt that, holding the office that he did under his Grace, specially connected as it was with the ecclesiastical buildings of the neighbourhood, he was bound to express how highly he appreciated the benefits likely to accrue to the district from the meeting of the Institute in Hull. The district was, as had been remarked, most rich in ecclesiastical edifices; but alas! he feared at this time they were wanting in persons interested as they ought to be in the antiquity of those buildings, and in searching out, as they ought to do, the peculiar and the different beauties that were so strongly displayed in many of them. He was thankful, therefore, when he felt that the meeting would create additional interest in their ecclesiastical buildings; for he, although a member of the Institute, had overlooked what was most deeply interesting, as showing the antiquity of the buildings. He believed that archæology was like all other real knowledge, the more they tasted of it, the more they would desire it. He hoped the present meeting would be the means of inducing many in those parts to take up the science of archæology, and that Hull would be again celebrated, as in ages past, for having those connected with it who understood and appreciated well the antiquities of their place and district.

The Rev. Canon Brooke, Vicar of Holy Trinity church, said he had been asked to offer the hearty welcome of his brethren the clergy, and of the officials of the churches of the town to the Archæological Institute. He had to express on their behalf that they felt themselves honoured by the visit of the Society, and that they expected to be greatly instructed and benefited by it. He thought he was not quite the person to express their thanks, because he was so very new a vicar of that parish, and he could hardly be well received by those who so well received old things as archæologists. (Laughter.) But he was sure, whether new or old, he fully expressed the feelings of his brethren and churchmen. They were very glad, indeed, to receive the Institute, and he thought there ought always to be an alliance between such an association as that and the clergy. In what his Grace had read they had heard a *resumé* of what was to be done, and they had seen plainly that the Society would find much interest in the churches, of which buildings the clergy were the guardians. But it was not on that ground that he thought such an alliance should exist, it was on this—and he thought he was not saying anything different in spirit from what had been said by the Lord President of the Institute and the Bishop of Lincoln,—when he said the great object was to enable them to realise the feelings, the habits and customs, of days gone past, that they might be able to see themselves, as it were, in real personal and mental contact with them. (Applause.) It was by knowing what had been the tendencies of people in the past, and what had been the consequences of certain tendencies in each age upon that which had succeeded it, that they might learn how to guide and modulate the thoughts and tendencies and feelings of the age in which they now lived. (Applause.)

He was rather glad to say that he was a new vicar, or he might be shamed of the church they were about to see; and he therefore hoped

that the impetus spoken of by the Bishop of Lincoln as one of the results of archæological meetings, would help on the great work of the restoration of that church, which would be the first building visited by the Institute. (Applause.)

Lieut.-Col. Pease welcomed the Institute on behalf of the laymen of Hull and the neighbourhood; expressing his great pleasure at the honour done them by the visit. He also begged leave to offer the Institute the hospitality of the residents.

Dr. King, President of the Royal Institution, offered a welcome to the Institute on behalf of the local institutions of Hull. He expressed the cordial sympathy and wish to co-operate which actuated those engaged in the pursuit of any branch of science towards those engaged in that of any other branch. The Society which had now met in Hull would, he did not hesitate to say, receive all the hospitality and all the assistance which the local institutions of the town were able to give. It was usual for people to think that archæology, as a science, was confined within narrow boundaries, but his Grace had already explained to them that to be accurate it was necessary to confine the attention of the Society within even narrower limits than the word "Archæology" meant. There were in this neighbourhood a large number of monuments which would doubtless prove interesting to their visitors; and he could not help expressing his opinion that almost the greatest interest must attach to the science which bridged over the period when primæval man was represented only by the flint implements which he had left, to our own day when the steam-engine had become almost a necessity, and when our walls and our houses were adorned by works of the genius of our sculptors and painters. How the one should have sprung up from the other must ever be one of the most interesting topics of human consideration.

He simply expressed the good feelings which the local institutions entertained to their visitors; and he might just mention that already this visit had been productive of one good effect, and that was the formation, in connection with the Society which he particularly represented, of an antiquarian section, which, if their friends would visit them at some future time, would, he was sure, be found exceedingly useful; for the great want they had hitherto felt was a lack of local people who understood and could explain their local monuments. (Applause.)

Alderman Atkinson proposed that the best thanks of the meeting be given to His Grace the Archbishop of York for presiding over the meeting, and for the eloquent and most useful address with which he had favoured them. He thanked his Grace on behalf of the inhabitants of Hull, and he could only say that his Grace had imposed upon them another obligation.

The Mayor seconded the motion, and having submitted it to the Meeting, it was carried unanimously with great applause.

His Grace having acknowledged the Vote, the Meeting separated.

The inaugural proceedings being over, the President, accompanied by a large portion of the assembled party, proceeded from the Town Hall to visit the various public places of interest in the town. The first place visited was the Grammar School, founded and endowed (A.D. 1486) by John Alcock, successively Bishop of Rochester, Worcester, and Ely, the son of an opulent merchant of Kingston-upon-Hull. Over the Master's seat in the lower school is a shield of the arms of Kingston-upon-Hull, and under them a Greek inscription, thus rendered:—

"O well built royal town, thou hast three crowns;
Therefore love the king thy benefactor."

In the lower school an elegant lunch was provided by the church authorities. The party then proceeded to the Holy Trinity Church, entering it at the west end, whence the restored portion was well seen.

The church was originally founded in or prior to 1285 as a chapel of ease to the then mother church at Hessle, a village 5 miles westward of Kingston-upon-Hull. The present building is cruciform, having a magnificent central tower, and is of three periods in its construction; the transept being of the time of Edward II. and the choir a little later, whilst a restored chapel on the south side of the choir is evidently of an earlier date than any portion of the existing church.

The Holy Trinity Church is one of the largest parochial churches in England. It is 272 feet long from east to west, the nave being 144 feet; the breadth of the nave of the transept under the tower is 28 feet; the length of the choir 100 feet; the breadth of the nave and aisles of the church is 72 feet; the length of the transept 96 feet; and the breadth of the choir is 70 feet. The Rev. G. O. Brown, M.A., acted as guide, pointing out the most prominent features, among which we may mention (1) the great east window, as a good example of the transition from flowing to perpendicular tracery; (2) the beautiful slender piers of the choir, with their pleasing capitals and arches; (3) the large arched piscina with ancient tiles; (4) the beautiful restored chapel opening into the choir, with a canopied shrine of rich design.

Messrs. J. H. Parker and E. A. Freeman made several remarks upon the architecture of the church.

Among the monuments of interest in the church not the least is that to the memory of the famous first Mayor of Kingston-upon-Hull in the south wall of the chancel, Sir William Delapole, who died on the 22nd June, 1356. This monument is of alabaster, and represents Sir William Delapole reclining, bare-headed, his hands supported on two cushions. His dress is that of a merchant—a mantle buttoned close to the neck, with a standing cape, and buttons down the sides. His coat has six buttons on the breast, and the sleeves are buttoned, and reach to his wrists. At his breast hangs a whittle, or small dagger, whilst at his feet is a lion.

Upon leaving the church the Trinity House was next visited. This is one of the most prominent and ancient of the many charitable institutions in Kingston-upon-Hull. It was originally instituted as a guild in honour of the Holy Trinity, the foundation deed being dated 4th June, 1369, but since incorporated by several royal charters for charitable and maritime purposes. The museum, council-hall, and banqueting-room of the house, with their rush-strewn floors and ancient furniture, were crowded with the visitors. Many ancient plans and drawings of the town, ancient and modern pictures, plate, and a most valuable and unique collection of MSS., connected with the Corporation of the Trinity House from its foundation, were exhibited or placed on the tables of the various rooms by the brethren of the house, and gave great gratification to the visitors.

The party then proceeded to the church of St. Mary. This church was originally erected as a chapel of ease to North Ferriby, another village to the westward of the present town of Kingston-upon-Hull. It is the fragment of a much larger and nobler edifice, and it is only by careful and judicious restoration that it retains part of its former beauty. The earliest

authentic notice of the church is to be found in the will of William Skayl in 1327, in which it is mentioned as a chapel to the Virgin Mary. The Rev. John Scott, M.A., the present Vicar, acted as *cicerone* on the occasion, and pointed out the architectural beauties of the church, which is altogether of the Perpendicular style, Messrs. J. H. Parker and Freeman making several remarks upon its architecture, which created some discussion. There is an interesting brass in this church; the inscription on it is as follows:—"Here lyeth John Haryson, Scherman and Alderman of this town; Alys (Alice) and Agnes hys wyfes. Thomas, John and Wyllm, hys sonnes, whyche (of whom) John decessed (died) the v day of December, in the year of our Lord MDXXV, on whose soules Jhû (Jesu) have mercy, Amen."

Gent writes that John Haryson was Mayor in 1537.

The simple and sensible manner in which the narrow street of Lowgate had been widened by the Local Board of the town, by piercing the church tower for the footway, attracted notice and approval.

From this point the High Street was explored. This is the most ancient street in the town, called in the old records "Hull Street," from its being built along the banks of that river, which divides the town of Kingston-upon-Hull into two parts, the eastern and the western. "Wilberforce House" was first visited. This is the most remarkable and interesting house in Hull. It was probably built by Sir John Lister, who was twice Mayor of Hull, in the reign of Charles I., and was elected to represent the borough in the Long Parliament. In this house he entertained the King in 1639. Here, too, in 1759, William Wilberforce was born, his grandfather then residing in the house, and carrying on the business of a Russian merchant on the premises, in co-partnership with Mr. Abel Smith, an ancestor of the Carrington family, under the firm of "Wilberforce and Smith." The fine old panelled dining-room where Charles I. was entertained was inspected; but the bedroom in which Wilberforce was born was, it is almost needless to say, the principal object of attraction to the party. The spacious and massive staircase, with its highly ornamented ceiling, also attracted much notice.

Notwithstanding its historical associations, this fine old mansion has fared no better than its numerous surrounding neighbours of less consequence, having one and all been turned into merchants' counting-houses. The front of the house is recessed from the street, having a fore-court. The building itself is a quaint, Dutch-looking, ornamented, red-brick structure, having a tower in the centre of the front.

From Wilberforce House the party proceeded to "George Yard." This is the entrance to what was one of the palace-like mansions of the merchants of Hull of the 15th century. Its history is comparatively unknown. It was doubtless a massive square building, with a court-yard in the centre, entered by the arch-way from "Hull" Street, and pierced through with a passage to its grounds or "plesaunce" in the rear. Many portions of the early block of buildings remain, together with the arch through them. A part of them has been converted into what has long been known as the "George Inn," in the wall of which is a carved and gilded representation of the national saint.

The western portion of these premises has been used as an inn from a very early period; tradition states, that before the Reformation the George Inn was much frequented by pilgrims proceeding to St. John's

shrine at Beverley; also that the house has a cloistered or vaulted communication with St. Mary's church, which lies to the south of it, and at a comparatively short distance. The house is said to have belonged to Sir Humphrey Stafford. After the ruin of this family the estate was the property of the Scale family, who may have converted it into an inn.

From George Yard the party proceeded to another of the many fine old merchants' mansions in High Street, now wholly occupied as merchants offices.

A house formerly occupied by Tuttebury, Mayor in the time of Richard II., afterwards known as "Hildyard's House," and afterwards as the residence of Alderman George Crowle, twice Mayor of Hull, and in 1726, M.P. for his native town, next engaged the attention of the visitors. The ancient oak framing is still nearly entire, and under some of the windows are carvings inserted in oak panels.

The "King's Head," one of the oldest existing houses in Hull, was next the subject of attention. It is a timber-framed hostelry of the latter part of the 14th century, with the usual arrangement of an open court, surrounded with galleries upon which the lodging rooms opened.

Another noble merchant's house, formerly belonging to the Bradley family, was next visited, and here the present owner (Mr. Field) received the party most hospitably, having an excellent luncheon set out in the old dining-room.

Mr. Des Forges also, in like hospitable manner, did the honours of his quaint house, which occupies the site of the house of the first mayor of Hull, Sir William Delapole.

In the evening a Soirée was given by his Worship the Mayor, in the Town Hall, at eight o'clock. The entire suite of rooms was thrown open, and there was a very brilliant assembly. A band was in attendance, under the direction of Mr. R. Smith, which played a selection of excellent music. A number of microscopes, with interesting objects for examination, were kindly provided by the Hull Microscopic Society.

The company was very numerous, comprising all the members of the Archæological Institute, and the visitors to the meeting, the principal inhabitants of Hull, and a considerable number of ladies and gentlemen specially invited for that occasion by his Worship the Mayor.

Wednesday, July 31.

A MEETING of the section of History was held in the theatre of the Royal Institution, at 10 a.m., at which Lord Talbot de Malahide presided. His Lordship, in opening the business of the section, said, that owing to the lamented absence of the Bishop of Oxford, he had been called upon to take that place. He felt highly honoured at being asked to fill so important and responsible a situation, and in that position he would offer them a few remarks, which he felt it his duty to make as President of that section.

His Grace the Archbishop on the previous day, in his admirable address, which he was sure would make a firm impression upon all who had the pleasure of hearing it, did not seem to be fully aware of the importance of that section, or of the attention which had always been given to it since the Institute had been founded. And it really would be taking a very narrow and limited view of archæology if they excluded the historical enquirer, who derived so much aid and illustration from the researches of the archæologist. Of course it was not the business of the archæologist to

write history on a large scale. Archæology did not consider those great events which formed, he might say, the groundwork and philosophy of history; but there were many more events which were not discussed in detail in history, many of those collateral points which referred to the habits and feelings of the different classes which could not be included in a history which embraced the leading events of the time. But even with reference to important matters in history, any person who had directed his attention to the subject must be aware of the many new lights which archæology had thrown upon them. In the subject of Numismatics, without the study of ancient coins, the world would not have been aware of the great extent and nature of the Greek civilisation. In the same way almost entire dynasties had been rescued from oblivion through the means of the numismatist. Until the researches of Sessini, the great numismatist, there were many of the kings of the Bosphorus whose names were not known to the historian. The same might be said in reference to the more eastern parts. Previous to the researches of archæologists like Wilson and others, the world was not aware that the diffusion of Greek ideas and Greek civilisation had gone so far; that in the most remote periods of the Persian empire in Bactria, on the borders of India, there were dynasties formed which ruled for centuries, and which possessed a great amount of Greek civilisation. Those in themselves were important additions to historical knowledge. To those they might add the important information given by ancient inscriptions. He was much struck on seeing an account of some Greek conveyances engraved on stone, which had been found in their original state in the neighbourhood of Athens. They were short, but he believed they would be useful as a model to the conveyancer of the present day.

In the same way great light had been thrown by archæology on other parts of the Roman empire. Without the researches of the archæologist, nobody would have believed that the influence of the Romans had penetrated so deep into the social life of their most distant possessions. Without archæology, no one would have believed that the Romans or their subjects in these lands had their villas, their baths—in fact, the most marked features of Roman life. Without archæology, no one would have conceived that the influence of their strange superstition, Mithraism, had extended so far, not only into Gaul, but to the borders of Germany, and even into this country. The hidden mystery of the Gnostics, and the semi-Christians, and semi-Pagans, sects who formed so curious a feature of the latter period of the Roman empire and the beginning of the rule of the Christian, had been greatly illustrated by archæologists. And he could not leave this subject without alluding to the great light which had been thrown on the early history of Christianity by the researches in the catacombs of Rome, where inscriptions, and pictures, and emblems were discovered, of the greatest possible interest to ecclesiastical antiquaries.

These matters were sufficient to show that the connection between archæology and history was close and multifarious. But he need only appeal to the members of that and kindred societies to find that they had not neglected the subject. Those who had attended their meetings must have derived great pleasure and instruction from the many valuable papers contributed to their meetings upon various subjects connected with English history. He thought it as well to set the Institute right upon this subject, as if they were divorced from historical enquiries, one of the great sources of their usefulness would depart from them.

Mr. Councillor Symons then read a paper on "The Early History of the River Hull." The writer discoursed upon the etymology of the name of the river, its rise and course. Originally the Hull flowed into the Humber nearly a mile to the west of its present mouth. As this silted up the new channel deepened. The floods in the Humber and Hull were next adverted to, and the progress of the trade of the port was traced by the writer. It had now the largest coasting trade of any port in the kingdom except London.

Several remarks were made upon this essay: Mr. J. Oldham calling attention to the peculiarly advantageous position of the port; and the Rev. J. R. Green asking if much was known of the progress of Hull in the reign of Edward II., which was an important time as regards municipal affairs. Were there municipal movements in Hull similar to those which took place at St. Alban's and Bristol? Mr. Symons supposed an answer must be sought for among the archives of the town.

Mrs. Everett Green then contributed a paper on "The Siege of Hull in 1642." The authoress noticed the circumstances which led to Charles I. coming to visit Hull,—viz., a dispute as to the removal of some warlike stores from the town. The spirited address of the Governor was quoted. The queen suspected that the arms would not be given up to the king, and her fears were verified. The course of events was then traced by the authoress, and some incidents in the siege were noticed. The main facts were already known; but much detailed information was for the first time brought forward by Mrs. Green.

Thanks were voted to Mr. Symons and Mrs. Green for their contributions.

A Meeting of the Section of Antiquities was held in the Public Rooms, at 11 a.m.; Archdeacon Trollope, in the Chair.

The Chairman said he felt proud at being placed in that position. He was a very humble student of archæology; but he had great pleasure in doing anything in his power to add to the success of the meeting. Archæology was so large a subject that it would be almost impossible even to give a sketch of the benefits to be derived from its study. The section over which he presided dealt with that portion of the subject which referred to a very early period of their history. Mr. Tindall was about to read a paper on the Pre-historic Relics of the Stone, Flint, and Bone period. Considering the interest which this subject was now attracting, both in this country and abroad, he had no doubt that much interest must attach to the experiences of one who had devoted so much time to the subject as Mr. Tindall.

Mr. Tindall then read a paper on "Pre-historic Relics in the East Riding." His interest in those antiquities had been first aroused by being allowed to examine a small cabinet of relics at Boynton Hall about thirty years ago. Being exceedingly successful during his earlier labours, and feeling a strong desire to increase the number of his specimens, he searched diligently in all the neighbouring estates within an area of fifteen miles, and he still continued his researches whenever time and opportunity permitted. For the sake of comparison he had introduced into his collection several specimens which had been sent to him from several other parts of Yorkshire, and from Ireland. Mr. Tindall then specified many of the more remarkable specimens which he had discovered. The axe heads were

found deposited in clay at the base of the roots of trees in the ancient forest which covered Holderness at an early period, extending to Hull.

After alluding to the discoveries which had been made in regard to the tumuli, Mr. Tindall observed that the great mass of stone implements had been found near Bridlington at various depths, and when compared with those found in other parts of Europe, he was inclined to assign to them a very high antiquity.

The Chairman, in thanking Mr. Tindall for the description he had given of his collection, remarked that the account they had heard was valuable evidence in favour of such a society as the Institute; for Mr. Tindall's interest in antiquities was owing to his having been permitted to examine a collection, and his own had sprung up from that circumstance. He (the Chairman) always tried as far as possible to make the proceedings of the Institute popular. Many labouring men, who had their curiosity excited by something they had heard, were now engaged in the work, and were now in the habit of preserving any curious objects they might find, instead of taking them to the nearest public-house and exchanging them for beer. After giving some instances of the preservation of valuable antiquities by such means, the Chairman conveyed the thanks of the meeting to Mr. Tindall for his paper.

Lord Talbot de Malahide said he had inspected with great interest the large collection of objects exhibited by Mr. Tindall. It was clear that the stone implements indicated two distinct periods of civilisation; what archæologists often called the early and the later stone period. It was interesting to compare the contemporary state of civilisation in different countries.

They had in the Museum of the Royal Irish Academy in Dublin a most remarkable collection of primæval monuments, a large collection of implements in stone—the greater proportion bearing a striking analogy to those collected by Mr. Tindall—and a large number of them in flint. Flint was very rarely found in Ireland, and he thought it probable that the material for the implements and arms which were used in Ireland was imported from England. In France and other countries they found the same class of implements, and he lately had the pleasure of visiting the Museum which the Emperor of the French had formed, and it contained a very considerable collection of works of art of the early period, a considerable proportion of stone and some of brass, and it would be found that the implements bore a very striking analogy to those exhibited by Mr. Tindall—at least there was a great resemblance. The saws in Mr. Tindall's collection were superior to any he had ever seen. Some of them had very small teeth, and seemed to have been produced with great delicacy of touch and manipulation. (Applause.)

In answer to questions put to him Mr. Tindall said that he always noted the place where any remarkable specimen was found, and the circumstances under which he found it.

Mr. Burtt then read an anonymous paper on the Yorkshire Tumuli, which had been forwarded to the local Committee. It was remarked that the largest of these tumuli were distinguished by name, such as "Willy Howe," "Sharp Howe," &c. "Willy Howe" had been carefully examined, and the result seemed to be that it is what is called a "twin" barrow. Many of these tumuli had been used as beacon stations; and the writer suggested that many of the "mill hills" were probably tumuli, and also

particularised other places which had in early times been used for the purposes of burial.

The Chairman made a few remarks on the paper, and the section then dispersed.

At about half-past one, a large party, comprising the members of the Institute, and the visitors to the meeting, and others who had been specially invited, started for Beverley, for the purpose of enjoying the courteous hospitality of the Mayor and the people of Beverley, and of examining the two magnificent examples of church architecture which are to be seen there. On reaching Beverley the party at once proceeded to the Norwood Assembly Rooms, where a magnificent luncheon was laid out in the large room, and arranged with good taste.

His Worship the Mayor, H. E. Silvester, Esq., presided, and was supported on his right and left by the more distinguished visitors, while the rest of the company were accommodated at three long tables, reaching the entire length of the spacious room. After thanks had been returned for the repast, the Mayor of Beverley, in a few very happily-spoken words, welcomed the Royal Archæological Institute to Beverley, and alluded in terms of confidence to the interest with which he was sure the company would view the churches they were about to inspect. He especially welcomed the Institute, on account of his Grace the Archbishop of York being the President for the year.

The Archbishop of York acknowledged the welcome of the Mayor, as did also Lord Talbot de Malahide, who, on behalf of the Institute, thanked the Mayor and inhabitants of Beverley for the very handsome manner in which they had been received, and proposed the health of the Mayor of Beverley. Mr. Christopher Sykes, M.P., proposed the health of Mrs. Sylvester, the Mayoress, who he knew had taken a warm interest in the arrangements for the visit. The Mayor acknowledged the toasts, and the complimentary part of the proceedings was brought to a close.

Before leaving the Norwood rooms, where a small collection of ancient plate and other remarkable objects was exhibited, Mr. C. Brereton read an account of the more striking points of interest in St. Mary's church, in which he gave an account of the restorations which had been carried out by Mr. Gilbert Scott.

After Mr. Brereton had concluded his paper, the party proceeded to survey the church. Some considerable time having been spent in this inspection, Mr. J. H. Parker pointed out some of the chief leading architectural features of the church, together with some of its peculiarities. The church had been much damaged by the fire in the 14th century, though much of the old work had been preserved. The variety in the styles of the windows, and between the capitals and arches in the chancel were the subject of remark. Mr. Parker much admired the painted ceiling of the time of Richard II., which had been carefully restored. He much liked those flat ceilings in lofty buildings—open roofs to the ridges were a mistake. Those richly painted and panelled ceilings were very valuable, and ought to be preserved.

From St. Mary's church the party proceeded to the Minster. Here the Rev. A. B. Trollope acted as guide, an office of no little difficulty in connection with an edifice with such an history and of such marvellous beauty. After Mr. Trollope had read a paper upon the subject, some critical remarks were made by Mr. Freeman, and the visitors scattered them-

selves over the building, examining and studying everything at their leisure. The very remarkable and beautiful "Percy Shrine" was especially the subject of notice and admiration.

In the evening the Historical Section met in the Royal Institution. The Rev. Canon Venables in the chair.

Mr. Fairless Barber gave a Paper descriptive of the Roman remains which had been discovered at Slack. This memoir will be printed at length in a subsequent number of the Journal.

The Rev. F. B. King read a paper on "Bells." After discussing the principles on which a good peal of bells should be arranged, he remarked that the church bells of the neighbourhood were not only less in size, but fewer in number than in any other part of England. He gave many examples in support of his statement, and dwelt upon the importance of the apparently small differences in the number and size of bells. Mr. King also referred to various styles of ringing both in England and on the Continent. In reply to a question from the Rev. J. R. Green, Mr. King could not say when the present fashion of ringing bells came into practice, but thought it was earlier than the 12th century. It was not known when change ringing first began.

Mr. A. K. Rollit then read a memoir prepared by Mr. W. H. Huffam, entitled, "Archæological Notices of Brough." The writer spoke of Brough as the nearest approach to the neighbourhood of Hull, made by the Romans in the form of a permanent settlement. It was situated on the northern side of the estuary of the Humber, opposite the Ermine Street at Winteringham, with which it was united by a *trajectus* or ferry. The claim of Brough to this distinction was challenged by other places, and the writer ably discussed in detail the points which he considered to be satisfactory evidence of its right to the title. Some discussion followed the reading of this paper, in which Mr. Freeman and the Rev. J. R. Green took the principal part. The points raised were the difference caused by times and circumstances in the flow of the tide up the Ouse, and the relative importance of the evidences of Roman occupation.

Thursday, August 1.

The Architectural Section met in the Royal Institution at 10 a.m., Sir Stephen R. Glynne, Bart., in the Chair.

The Ven. Archdeacon Trollope read a Paper on the "Sculptures of Lincoln Cathedral." This will be printed in a subsequent number of the Journal. The Archdeacon attributed the sculptures to the time of Remigius, the first Bishop of Lincoln, under the Norman dynasty. He determined to set out the great truths of Christianity in stone, and this series of sculptures was their exposition. The sculpture were then described in detail.

In the discussion which followed the reading of the Paper, Mr. Freeman expressed an opinion that the sculptures were later than the period of William the Conqueror. The work of the west front he thought was of the time of Bishop Alexander, or, if not, it must have received some changes in that time. If of his period it rather upset the notion that Englishmen needed a man to come over from Normandy to teach them the truths of Christianity. They were not, at the time of the Conquest, much behind the rest of the world, and the conquerors looked with wonder

on the beauty of the work of the English, especially in some of the arts subordinate to architecture, which had been carried to a greater degree of perfection here than even in Normandy.

Lord Talbot de Malahide agreed that though our ancestors were not such barbarians as was represented, still it was found necessary to appeal to the eye at a much later period than any to which these sculptures could be assigned.

Mr. E. Sharpe remarked that the early sculptors, and others who had charge of the works, were by no means competent artists; and, as they often introduced into their subjects many fanciful features, they must allow some licence. No subject was more difficult to discuss than that of carved human figures, for artists themselves differed so much about them. At that early period he thought that artists in this country had arrived at a more accurate designing and executing of the human figure than they had abroad. The Normans gave a tone to almost everything we possessed in regard to architecture for a period of about eighty years.

The cordial thanks of the meeting having been voted to the Ven. Archdeacon for his interesting Paper,

Mr. E. Sharpe read a Paper upon Selby Abbey Church. In this Paper he gave notices of other churches in the East Riding. Mr. Sharpe first alluded to the grand scale on which Selby Abbey was designed. It exhibited three different periods of architecture—the Roman, the Transitional, and the Decorated—the chief characteristics of which, and the illustration of them by the example under notice, were discussed by Mr. Sharpe.

Mr. Sharpe also presented to the Meeting an arrangement of the leading styles of architecture met with in the different churches which had been, or would be, visited by the Institute, commenting on their various features.

After a vote of thanks to Mr. Sharpe for his valuable contribution, the Rev. Chas. Overton read a Memoir on a Brass to Nicholas de Luda in Cottingham Church. Nicholas was said to have been a Capuchin monk, and was made Rector of the church in the latter part of the fourteenth century. The monument to his memory bears the date 1383.

Mr. J. Richardson spoke of the recent desecration of the tomb to Nicholas de Luda, and of the necessity for a careful watch over these ancient monuments.

Thanks having been voted to the writer of the Memoir, an Essay by the Rev. Felix Laurent of Saleby on a Monument to one of the De Veres was read. It consists of a figure in armour of the thirteenth century, on the chancel floor of the Church of Goxhill, near Barton-on-Humber. The figure is in a complete suit of chain-mail, without plate. The legs are crossed; there is no animal at the feet, but on the left side, at the bottom of the folds of the surcoat, are the fore paws and the right hind paw of a dog, who is sitting. The left hand grasps the sheath, the right hand the hilt, of the sword.

After noticing in detail the history of the family of De Vere, the author noticed events likely to apply to the monument in question, it being still doubtful to what particular member of the family it had been erected. Some Veres of later periods are mentioned by Poulson as being connected with Sprotely, and related, doubtless, to those of the county of Lincoln. All were probably descended from Alberic de Ver of the Conqueror's time.

In the afternoon a considerable party visited Hedon and Patrington; being conveyed by special train. At Hedon the party, headed by His Grace the Archbishop of York and Lord Talbot de Malahide, were cordially received at the Town Hall by the Mayor of Hedon (A. Iveson, Esq.). Having partaken of wine, the Mayor welcomed the Institute to the ancient borough founded by Athelstan, and to which charters of customs and liberties had been granted by Henry II. and many other sovereigns. In the borough there were still two objects of great interest to archæologists—one was the noble church of St. Augustine, and the other was the ancient cross erected at Ravenspurne to commemorate the landing of Henry Duke of Lancaster.

The Rev. R. K. Baily, the Vicar of Hedon, then introduced Mr. Street, the architect to the party, as their proposed guide round the church. Being a new Vicar, he did not know much of the church, nor did he know much of the science to which the Institute had devoted its attention. At the same time he claimed to be deeply interested in those matters, and especially in all that belonged to the noble church of Hedon. In examining the church they would see much tending to decay; but he hoped they would consider the circumstances of the place, and not attribute their neglect of that fine structure to a want of appreciation of it. There was an excellent prospect, however, of the work of restoration being shortly commenced. He bade the Institute welcome to Hedon.

His Grace the Archbishop thanked the Mayor and the inhabitants of Hedon for their kind reception of the Institute. As time pressed, he would only observe that they would not desire to measure Hedon by its present position, but by that which it occupied for so many centuries as one of the most important towns of this great country. Archæologists would look through the telescope, as it were, into the far past, and see only the Hedon of that time.

The party then left the Town Hall, and proceeded to inspect the church, under the guidance of Mr. G. E. Street, to whom its restoration is about to be entrusted. Mr. Street pointed out how the several different styles had been introduced, pauses having been made in the building from time to time, and the consequence was its great variety in style. A noticeable feature about the church was, that, while the eastern part had the character of a conventual church, the western part had that of a parish church. The walls throughout were extremely thin, and the church was therefore in a worse condition than it would otherwise have been.

Time being now pressing, the party proceeded on to Patrington. Here they were met by the Rev. F. Shepherd, and by him conducted over the church. The work of restoration was in progress, and the incumbent referred in detail to this work, and to that proposed to be executed.

The Rev. F. B. King, of Burstwick, read a brief paper upon the church. The great peculiarity of the church was, that the transepts were double-aisled, a very uncommon circumstance, but there were no aisles in the chancel. The church was of the fourteenth century; but the great east window was of the Perpendicular period.

Mr. Freeman pointed out other peculiarities worthy of notice. The extraordinary development of the transepts had thrown into insignificance the nave and chancel of the church. The windows were mostly fine, though hardly equal to those of Hedon. The tower and spire, he thought,

were failures, and quite unworthy of the rest of the building. The tower in no degree approached that of Hedon. The new covered roof of the chancel had much pleased him. It was of a kind that might be constructed at little cost; and, if desired, any amount of decoration might be afterwards applied to it.

Mr. Parker also made some remarks upon the church, which he considered a beautiful example of the most beautiful of all styles, the decorated.

Upon leaving the church, a large number of the party were hospitably entertained by the incumbent.

In the evening a *conversazione* was held in the temporary Museum, but it was scantily attended.

Friday, August 2.

A meeting of the Historical Section was held in the Royal Institution, Lord Talbot de Malahide in the Chair.

The Rev. J. Byron read a Paper on two Saxon saints, Chad and Ethelrida. The Rev. J. R. Green followed, with an account of "The Battle of the Standard." This was a very important event in the history of Yorkshire, and especially so in that neighbourhood of Thirsk. It was the last of the great Norman battles which raised the Norman power from being a small race in the north of France to the great conquering race of the West. It was also the first of the modern battles in which the Norman and the Englishman were fused together. Having described the circumstances under which Stephen came to the throne, and noticed the events of the early part of his reign—a reign which was especially welcomed by the burghers, and the inhabitants of cities, as ensuring the reign of "order," the writer went on to describe the circumstances of the great "Battle of the Standard." This battle was not really a struggle between the English and the Scotch, but between the Normans and the great race of the Celts, against whom the Englishmen had been struggling. He reviewed the invasion of Northumbria by the hordes of the Lowlands, and detailed how the Barons of Yorkshire took advice of Thurston, and mustered their retainers at York. After a three days' rest, the forces marched along the banks of the Ouse to the north, to meet the Scots. On their way they were joined by the peasantry, who marched into Thirsk carrying two banners, the banner of St. Winfred and the banner of St. John of Beverley, which would certainly be followed by the men of Wyke or Hull. At Thirsk they were joined by the De Mowbrays. But the English were still terrified at the force they were about to meet, and tried to make terms with the Scots. The attempt failed, and the Scots swept down upon Yorkshire. After describing the position which the English occupied, to give battle to the enemy, Mr. Green gave a very short account of the battle, which lasted about three hours, and was one continuous slaughter of the wild and undisciplined Scotchmen. The English were but little affected by this battle; but it was important, as bearing on the political fate of Scotland. David's reign was afterwards prosperous; and it was a reign of great civilisation and progress.

Shortly after the sitting of the Historical Section had terminated, a large party started to examine the ruins of Thornton Abbey, and the two ancient churches at Barton.

Arrived at the handsome western gate-house, the Rev. J. Byron gave, in a pleasant, familiar manner, a sketch of the early history of the house, which was founded in the twelfth century by William le Gros, the founder of Meaux. The gate-house was a fine example of fourteenth century work; the chapter-house, and other portions, being much earlier. After Mr. Byron's remarks, some discussion of the details of the architecture ensued; and Mr. Parker gave some additional and interesting particulars with reference to the defences of the house, and the collegiate arrangements it underwent. The gate-house was also a guest-house—a gate-house to the Abbey, a house for receiving guests, and at the same time a guard-house for protection, for which it was well prepared.

The arrangements of the upper stories were carefully examined, and the whole system was considered to be very complete and interesting.

Upon the chapter-house, and the offices of the Abbey, Mr. E. Sharpe made some observations. The existing fragments showed the building to have been one of the most perfect of its style, the Early English or Geometrical. It was precisely similar in arrangement to the chapter-house of Westminster, being approached by a vestibule plainer than the building itself, but still sufficiently beautiful. After adverting to the historical evidences relating to the building, he ventured to hope that they would shortly arrive at some more precise knowledge of the progress of that most beautiful art through all its stages. Mr. Sharpe then again referred to the various examples of the architecture they had seen in the course of their excursions, in illustration of the classification he had drawn up; and in the somewhat discursive commentary which followed, Mr. Freeman and Mr. Parker took a considerable share. The use of a small cell near the chapter-house—by some considered to be a penitentiary, by others, a mortuary chapel, was much discussed.

Returning to Thornton station, the party were next conveyed to Barton, and at once proceeded to St. Peter's church. The party were welcomed by the Vicar; and the architectural features of the fine old church were then examined with very great interest. These were discussed and explained principally by Mr. Freeman and Mr. Parker. Mr. Freeman thought the church a fine example of the Romanesque style of architecture, which having been in use in the greater part of Western Europe, died out in England in the course of the eleventh century. This view he supported by an argumentative speech on the various styles of architecture, to which Mr. Parker gave an unqualified dissent.

The party next visited St. Mary's church, where Mr. Sharpe and Mr. Parker explained in detail the various styles of architecture which the church comprised; but the time at the disposal of the party was somewhat shortened by the hospitable attentions which had been shown to them.

In the evening a *conversazione* was held in the Theatre and Museum of the Royal Institution, and a concert of vocal and instrumental music, sustained chiefly, and most creditably, by the amateur talent of Hull, gave great pleasure and satisfaction. The entertainment was given by Dr. Kelburne King, the able president of the Institution. At the close of the concert, Mr. Freeman read a Paper on the "Battle of Stamford Bridge." This was a very elaborate essay, embracing the whole of the circumstances which led to that famous battle. The engagement between the armies of Harold of England and Harold of Norway was described with

a warmth of illustration, and a poetic fervor, which aroused the audience to enthusiasm.

Saturday, August 3.

Shortly after 10 o'clock, a special train conveyed a large party of excursionists to Howden station, whence they were taken in carriages to the town of Howden. Here the Rev. J. L. Petit met the party, and they proceeded at once to an examination of the Collegiate church. The very fine effect of the noble west front, Mr. Petit thought, was partly owing to the decayed condition of its sculpture. For the magnificent tower Howden was indebted to Archbishop Scurlow, who was said to have built it as a refuge in case of flood. It was, doubtless, intended to answer as a landmark; and that it should have an individuality, as the tower of Howden church. Mr. Petit then led the party into a consideration of the architectural beauties and peculiarities of various parts of the structure; but as he has, with his accustomed kindness and liberality, promised his lecture (with illustrations) to the Journal, we shall follow him no further. Mr. Parker and Mr. Sharpe made some remarks upon the architecture, in addition to those of Mr. Petit. After Mr. Petit had discoursed upon the interior of the church, Mr. Freeman proceeded to speak of the ecclesiology or history of the edifice. Originally, it was a parish church, and then became collegiate; that is, a body of secular canons was founded in the parish church, for the better performance of divine service. Where the monastery was also the parish church, the monks and the parishioners usually quarrelled, and for this reason—which was a good one—that the rights and comforts of each clashed with the other. As a kind of compromise, they generally divided the church into two sections by building a wall across the western arch of the lantern; the parish taking the western portion, the monks that to the east. But the collegiate church was vested in a corporation, and the parish had a right to use the chancel. So there was but one great door for admission into the choir (as in Howden), and this arrangement showed that the parishioners and the canons were on good terms, and used the church in common. There was a Chancery suit in the reign of Edward VI. as to the repair of the choir. It was never determined; neither party repaired the choir, and it fell to ruins.

The Rev. W. H. Hutchinson then read some curious extracts from the parish registers (which date from 1595) relating to miscellaneous subjects. These entries contained a mixture of religious feeling, with accounts of, or allusions to, temporal matters.

After an examination of some monumental brasses, portions of urns, and other objects of antiquity found at Howden, the party (several sections of which had been most hospitably entertained by the principal inhabitants,) returned to the station, and proceeded to Wressel Castle, Mr. Parker acting as guide.

Previous to a careful examination of the castle, Mr. Parker read Leland's account of the building, as contained in his own work on "Domestic Architecture," and spoke of the history of the structure. Mr. G. T. Clark, of Dowlais, gave some curious particulars relating to the castle; among them, that the Earl of Northumberland left the place to Henry VIII., who, in September 1541, passed two days there, accompanied by Catherine Howard. It was there that her unfortunate propensities were discovered.

From Wressel the excursionists continued their journey to Selby, and at once proceeded to the Abbey church. Here Mr. E. Sharpe acted as guide; and nothing could have been more interesting and instructive than his account of the peculiarities of styles of architecture, or of the many other details and particulars with which archæologists desire to become acquainted. Mr. Sharpe conducted the party through and around every part, and made all his comments in the most lucid and intelligible manner. He was much assisted, he said, by the new work of Mr. Wilberforce Morrell, on the history of Selby and the Abbey church, which he spoke of as being compiled with more taste, more skill, ability, and discrimination, than such works could generally boast. From this volume Mr. Sharpe quoted many particulars. In this place it is not in our power to give *in extenso* the elaborate architectural history of the Abbey church with which Mr. Sharpe favored his auditors; it must suffice to say, that it seemed to be exceedingly satisfactory to a highly discriminating audience, and that Mr. Parker and Mr. G. T. Clark found little to add, in fact but a few suggestive comments, and a very general approval of the highly interesting subject-matter. Mr. Freeman made some observations as to the character and type of church somewhat similar to those he had given at Howden. Selby was a great and purely monastic establishment. He discoursed upon some other peculiarities in the church, and conducted the party to those portions of the edifice which he thought especially remarkable, or worthy of examination.

Before the archæologists had left the church, Mr. Sharpe called their attention to a very interesting discovery which had been made that afternoon. The excavators, who had been laying bare the foundations in front of the existing south porch, had discovered a stone slab bearing the inscription "Alexander." It had been found placed upon a decayed wooden coffin; and, on removing a little more soil, a complete skeleton was found, the skull and bones being undisturbed. The stone slab, which was about six feet long by eighteen inches broad, was so marked as exactly to indicate its date. It was surrounded with the dog-tooth moulding of about the year 1220; and it therefore became interesting to know who this "Alexander" was. It seems that the twelfth abbot was so named;—he was elected in 1214, and resigned in 1221. The date of his death seemed to be unknown; but Selby was most probably the place of his interment, and the inscription on the slab his simple memorial. The omission of the word "Abbas" in the inscription, of course, was owing to his not occupying the office at the time of his decease. Mr. Sharpe concluded his remarks by paying a graceful compliment to Mr. Liversage, one of the churchwardens, for the great interest he had taken in opening up the approach to the grand west door of the church, by which the beautiful bases of the finely clustered shafts were exposed to view.

Monday, August 5.

At a quarter past nine o'clock, a special train of members and visitors started for Driffield, Bridlington, and Flamborough. On arriving at Driffield, they proceeded to the church, where they were met by the Rev. J. Browne. He first pointed out the figure said to be that of Paulinus, to which the Archbishop had alluded in his opening address. On entering the church, a Paper, prepared by Mr. Browne, was read by Mr. Fowler, of Louth, in which he discoursed upon the history and architectural features of the

church. Mr. Parker and Mr. Freeman then made some observations upon the church, and especially upon its fine tower, which was one that would not be despised in Somersetshire. The party then went to the Corn Exchange, on the invitation of the churchwardens, and partook of refreshment. A cordial vote of thanks was passed, for this attentive mark of courtesy; and one to Mr. Browne, for his description of the church. The vote was acknowledged by Mr. Mathews, and the party then returned to the train.

Arrived at Bridlington, the party first inspected the old gateway, and Council Hall. On repairing to the church, an account of it was read by the Rev. H. F. Barnes, the Vicar, in which he concluded with a graphic account of its destruction, at the time of the Dissolution. Mr. Parker supplemented the remarks of Mr. Barnes, speaking, of course, upon the architecture of the structure, both as to its interior and its exterior. Mr. Freeman, in commencing his remarks, regretted the absence of certain Members of the Institute, who would have been able to have given interesting particulars of the church at Bridlington. In that place they had come to another great monastery which had to do with a parish church, so that they had the opportunity of comparing the peculiarities of each class of church. At Bridlington the church was one of those which was at once monastic and parochial. At the Dissolution, the portion belonging to the monks was forfeited to the Crown, and its destruction had been most complete, for very few indications of the tower and choir remained. The monks who occupied the priory were of the order of St. Augustin, which differed somewhat from the other orders, being less strict, and less separated from the world than any other. Mr. Freeman then pointed out the site which had been occupied by the domestic offices and the other buildings of the Monastery; especially remarking, that the dormitory was always in an upper part of the building, and not in the lower apartment which had been ascribed to it.

From Bridlington, carriages conveyed the excursionists to Flamborough, through a richly-wooded, undulating country. Arrived at Flamborough, the little church there was the first object of interest, of which the architectural points were ably pointed out by Mr. Parker. As to the chancel arch not being perpendicular, it was by no means an uncommon feature, the idea being to make the arch like the curved side of a ship. It was a mistake to have these arches pulled down because they were considered unsafe.

On returning to Bridlington, the Danes' Dyke was visited; but by this time a heavy rain had begun to fall, and the party venturing upon the deviation from the homeward route was but small. Hull was reached at about eight o'clock.

The temporary Museum was lighted up in the evening, but owing to the complete change in the weather, the attendance was exceedingly small.

Tuesday, August 6.

The Annual Meeting of Members was held in the Grand Jury Room of the Town Hall, at ten o'clock, Mr. G. T. Clark in the Chair.

The Annual Report of the Central Committee was then read by Mr. C. Tucker, as follows:—

In taking up the history of the society from the date of the last report,

your committee have to speak of a period in which many events of importance to the society and to archæology in general have occurred.

The meeting of last year in London, originated in the desire of the committee to carry out the wishes of the late Prince Consort, to promulgate the results of a complete examination of the early portions of Windsor Castle and its history; but the unexpected death of the prince caused its postponement for a time. In the summer of 1865, however, it was ascertained, that in the event of the meeting for 1866 being held in London, Her Majesty was disposed to afford it the favor of her most gracious patronage, and that the castle at Windsor would be open to the members of the society, and visitors to their meeting, and that every facility would be given for the examination of the structure in every part.

His Royal Highness the Prince of Wales also consented to be named as President of the meeting. As might have been expected under such favourable auspices, the annual gathering was very well attended, and the excursion to the royal castle proved extremely interesting. The latter part of the day was devoted to Eton College, and the result was that Her Majesty graciously expressed her desire that the institute should thenceforth be designated as the "Royal Archaeological Institute," &c.

During the present year the science of archæology has been duly honoured by the formation of an archæological series in the International Exhibition at Paris—a proof of a great advance of public interest in the pursuits of that science, and especially fostered in France by Imperial support and personal participation. The President of your society, moreover, was invited to take part with the presidents of several leading institutions in England, with the Royal Commissioners for the Paris Exhibition.

The establishment of a permanent museum of early antiquities in the palace at St. Germains, is a conspicuous incident which may, we hope, excite activity nearer home, and has already produced some good in this country in the purchase of the celebrated Blacas collection recently lodged in the British Museum.

The works in progress at the time of our last meeting at the venerable Abbey church at Westminster, at the instance and under the guidance of the present enlightened dean, are still continued; the liberal sums devoted by parliament to the careful repairs of the Chapter House are a proof, we hope, that the House of Commons feels some interest in the care and preservation of that and other noble works of by-gone days. The removal of the old record presses, which had so long disgraced that beautiful building, has brought to light a series of wall paintings of extreme interest. The Dean of Westminster, when a member of the chapter at Canterbury, called attention to documentary matters of much public importance, and we cannot but express a hope that capitular bodies generally will devote some attention to the care and arrangement of their muniments.

In excavations in England, the Rev. Canon Greenwell has carried on an extensive investigation of burials, and vestiges of the earliest races, in the East Riding of this great county; it being the first really scientific exploration on an extensive scale in this part of England. The results are preparing for publication, and we hope will not be so long delayed as the promised book on Windsor, with which the names of the Dean of Windsor, Mr. Woodward, Mr. Parker, and others, are, it is believed, connected. A second series of investigations has taken place at *Slack*,

the site of the Roman station of Cambodunum, in the neighbourhood of Huddersfield, under the guidance of Mr. Fairless Barber, and other members of the archæological and philosophical societies of that town, and have been attended with instructive and interesting results. (See present Number.)

The Palestine explorations, the objects of which were brought before the meeting in London last year, have been continued, and Sir Henry James has published plans and photographs of Jerusalem, of great interest.

Explorations of remarkable remains near Salisbury, among *pit dwellings* of unique character, have been carried on by Mr. Blackmore, and the relics are deposited in the museum which bears his name in that town, and which has taken rapid development as a permanent depository in Wiltshire of a most instructive description, liberally endowed by its founder, and admirably organized and arranged by Mr. Stevens, our member, Mr. Nightingale, of Wilton, and other local antiquaries. How desirable a place one cannot but think it might be in which to deposit the great Wiltshire collections, made by Sir Richard C. Hoare, and thus render them available for public instruction, instead of lying forgotten at Stonehead.

The bequest of the Christie collection to the British Museum is an important acquisition, constituting the most complete ethnographical series yet formed; it has been arranged by Mr. Franks in the donor's late house in Victoria Street, Westminster, where it may be seen on Fridays, during the whole day.

Another instance of private munificence is the gift by Mr. Mayer of his vast collection to the town of Liverpool, combining as it does examples of all our porcelain manufactories from the earliest time down to the present century, and of all the useful arts and manufactures now brought to such exquisite perfection in this country, and a great variety of miscellaneous antiquities, including the Fawcett collection.

We must now turn our attention to a less pleasing subject, viz., the obituary, of which for 1866-7 is unusually long and heavy.

Within less than a month after the London meeting the Marquis Camden died almost suddenly; by which the Institute lost a most accomplished nobleman as its president, who was at all times ready to promote the interests of your society, and of archæology in general.

Your committee have also to mourn one of the earliest true old friends of the society, in Mr. Hawkins, who, as treasurer for many years, and trustee to the last, never missed an opportunity of promoting the advancement of the Institute, and the study of the science it is your object to promote.

In the Rev. Hugh Jones, D.D., rector of Beaumaris, and local secretary for Wales, an early member and most constant attendant at the annual meetings, where we miss him now for the first time.

Mr. Thomas Alcock, M.P. for East Surrey, one of the very earliest members.

Sir John Hippesley, Bart., many years a member.

Henry Crabbe Robinson, an original member, who helped to form the society.

Freshville J. B. Dykes, a hearty supporter of the Carlisle meeting,—when he joined the society; well informed in local antiquities, and especially in family history, and always ready to impart information.

The frequenters of our meetings, more especially in the Midland Coun-

ties and at Edinburgh, will remember the Rev. John Hamilton Gray, of Bolsover Castle, a liberal contributor to the temporary museums of Stuart relics, &c., &c.

James Espinasse, Recorder of Rochester, an early member, who gave us valuable support at Rochester, by affording the County Court for sections, and took part with the Earl Darnley, and other leading members of the Kentish archæologists, to welcome the society.

The Rev. Charles Gaunt, Rector of Isfield, local secretary of the society for Sussex.

The Rev. H. G. Nicholls, friendly auxiliary at the Gloucester meeting, who gave a memoir on iron works in the Forest of Dean; printed in Journal, Vol. XVII., 226.

And among the friendly auxiliaries at our annual meetings, we have to lament Dr. Pellew, the Dean of Norwich.

Sir Charles Hastings, president of the Worcester Philosophical Society, who gave the use of their rooms and many contributions to the Worcester Museum.

Joseph Robertson, General Register House, Edinburgh, a most useful aid at the Edinburgh meeting, and always ready to afford information from the vast stores of documentary knowledge under his charge.

Mr. Dorrien, of Funtingdon, a warm friend at our Chichester meeting.

The lease of the rooms in Burlington Gardens having expired, and the rooms being now too small for your largely increased library, added to the extremely unaccommodating proceedings of the landlord, induced your committee to look out for more commodious apartments, and they consider themselves fortunate in having obtained a spacious suite at No. 16, New Burlington Street, with every accommodation they require, being sufficiently spacious for your monthly meetings, thus avoiding the necessity of hiring any other rooms for that purpose, The late secretary and librarian having resigned, your committee feel much pleasure in reporting that they have been fortunate in securing the assistance of an able and active gentleman, on whom those duties have now devolved.

The chief Papers at the London Congress last year were:—Sir John Lubbock's Preliminary Address, in which the subject of primæval antiquities was so fully and ably treated; Dean Stanley's eloquent discourse upon Westminster Abbey; Dr. Guest's elaborate account of the Campaign of Aulus Plautius, in which the true origin of the great metropolis of England was clearly indicated; Professor Willis's exhaustive discourse upon Eton College; and Mr. G. T. Clarke's lecture upon the Tower of London, in which the architectural history of that fortress was so intelligibly and succinctly displayed; the lecture of Mr. Parker on Windsor Castle, in which he so admirably elucidated the dates of the various parts of that fabric.

The Report having been unanimously adopted, that of the Auditors, comprising the balance sheet for the past year, was also read and approved.

Announcement was then made of the proposed changes in the Central Committee, when the vacancies were duly filled up, and the auditors for 1867 were elected.

The question of the place of meeting for next year being broughtforward, Mr. Burtt adverted to the recommendation of the London meeting that Dublin, Exeter, Hereford, and Hull should next be visited. As theywere then

at Hull, it was for the meeting to decide whether, under certain circumstances which affected each of the other places, they would determine to go to either of them next year. The political state of Ireland appeared to render it undesirable to go very soon to Dublin; the proposed meeting of the British Association in the West in 1869, and the absence of railway accommodation to objects of interest round Exeter, seemed to render it undesirable to go there very soon; and Hereford was appointed for the place of meeting of the Cambrian Association for that very year. Under these circumstances, the Council thought it desirable to submit the claims of some other place to the consideration of the members, and Lancaster was considered to have many recommendations. He then read a cordial invitation from the Corporation of Lancaster for the Institute to hold their meeting in that town next year.

Considerable discussion followed. Exeter and Hereford were each formally proposed as the places of meeting, and rejected. On the proposal that Lancaster be adopted, the members were found to be equally divided, and the Chairman gave his casting vote against the proposal. It was then decided that the final decision be left to the Central Committee, with the recommendation that one of the following places be chosen—King's Lynn, Southampton, Exeter, Dublin, or Lancaster.

The General concluding Meeting was then held in the Mayor's parlour of the Town Hall, the Mayor (John Loft, Esq.) in the Chair.

Mr. G. T. Clark proposed a vote of thanks to the Mayor and Town Council of Kingston-upon-Hull for the use of the Town Hall, and for the great facilities afforded for the accommodation of the Institute. He expatiated largely upon the very hospitable reception which had everywhere been accorded to the Institute, although some of its members had not spared criticism upon what they had seen. Speaking of the clergy, Mr. Clark said they had received the Institute not with bell, book, and candle, but with bell and book, because the steeples pealed out their sounds of welcome, and the clergy had in their hands books which showed that they had studied, and judiciously studied, the churches committed to their care. The churchwardens, too—and it was very rarely indeed one had to praise a churchwarden—had done all they could for the Institute and the visitors. Then the hospitality was not to be despised. He had found Yorkshire miles uncommonly long, and the keen air of the moors very appetising, but the refections came upon them with a rapidity that was sometimes alarming.

In looking upon a town which in the fourteenth century produced the great house of the De la Poles, and in the nineteenth century the great name of William Wilberforce, he thought they might well be proud of it. He wished the town every material prosperity, and that they might employ their wealth as was done by the earlier members of the house of De la Pole—that their members of Parliament might be such men as Andrew Marvel, and their clergy men of piety like the Milners.

Mr. Freeman, in seconding the resolution, uttered a few words of warning against the dangers of restoration in churches.

The vote of thanks was acknowledged by the Mayor.

The Rev. E. Hill moved, and Mr. Tucker seconded, a vote of thanks to His Grace the Archbishop for accepting the presidency of the meeting, and for the able address with which he had favoured them.

Mr. Hill then moved, and Mr. Stephens seconded, a vote of thanks to

the Local Committee and its hon. secretary (Dr. Rollit) for their admirable arrangements for the reception of the Institute.

Dr. Rollit acknowledged the vote on behalf of the Reception Committee, though he felt the Mayor, as its chairman, would have been its more fitting representative. It had been a great pleasure to him to work as one of the Mayor's lieutenants in so important a matter, the success of which was attributable to the whole staff of which he was but an active member. He felt that much advantage would be derived from the visit of the Institute. Such meetings, in places distant from London, did much to eradicate provincialism, and to raise the standard of acquirement. He was sure the Reception Committee would be all much gratified to find their labours estimated as they had been.

Mr. Parker moved, and Mr. Greenway seconded, a vote of thanks to the Literary and Philosophical Society for the use of their rooms; coupling with the vote the name of Dr. King.

Dr. King, in acknowledging the compliment, said that the visit of the Institute must have done much to raise the tone of thought in the town.

Mr. Burtt moved the thanks of the Meeting to the contributors of Papers and of objects to the Museum. He spoke of the instructive and interesting Papers which had been read, and alluded particularly to those by the Rev. R. Green on the Battle of the Standard, and of Mr. Freeman on that of Stamford Bridge, as illustrating the distinctive characteristic of the inhabitants in this part of the country—their fighting capabilities.

Mr. Tucker seconded the motion, which, having been put and carried, was acknowledged by Mr. Freeman.

Mr. Crabbe moved, and Mr. Carthew seconded, a vote of thanks to the Mayor of Beverley and the gentlemen associated with him for entertaining the Institute on their visit to Beverley, and to the clergy and others for their great kindness on the occasion of their excursions.

The Rev. Canon Tewson responded on behalf of the clergy.

Dr. Rollit proposed, and Mr. Kerby seconded, a vote of thanks to the guarantors who had provided the funds for the reception of the Institute.

Mr. Alderman Atkinson responded on behalf of the guarantors, remarking that they were amply repaid by the success which had crowned the meeting.

The Mayor then remarked that it devolved upon him to say that the meeting of the Royal Archæological Institute in Hull was at an end.

In the afternoon a party was formed, under the direction of the Rev. E. Hill, to visit Cottingham church, Baynard Castle, and other places of interest. The weather, however, was exceedingly unpropitious, and the number was very small. The Rev. C. Overton received the party, conducted them over the church, and discoursed upon its architectural features.

Mr. T. Wilson most handsomely provided a collation for the Institute, an attention which was acknowledged by Mr. Hill on the part of the members. On their return from visiting the site of Baynard Castle the Rev. C. Overton read a Paper on the "History of Cottingham." Upon this Paper some discussion ensued, the effect of which was to discredit the popular story of the burning of Cottingham Castle to prevent a visit from Henry VIII.

The party then returned to Hull.

The Museum.

This was formed in a long room of the suite known as the "Public Rooms," in Jarratt Street. It contained a large collection of objects of all kinds, brought together as illustrating the archæology of Hull and its vicinity, ranged in cases round the room, or displayed upon tables. Most important of these was a fine collection of flint and stone weapons and utensils, collected during the last thirty years, from *tumuli* in the East Riding of Yorkshire, by Mr. Tindal, of Bridlington. These comprised an endless variety of the usual forms of hammers, axe-hammers, arrow-heads, stones for hand-grinding, knives, missiles, &c. They had been collected within a radius of about fifteen miles from Bridlington, and were decidedly of a grit and quality differing from the usual stone found there. A molar tooth and tusk of the elephant had been found by him at Sewerby. Mr. Mortimer also contributed many similar objects in flint and stone. He also exhibited a case in which was imbedded in cement the skeleton (thought to be a female) found some years ago in a barrow at Fimber, between Driffield and Bridlington. It lay exactly as when found—on its right side, and its height of about 5 ft. 4 in., cramped into its *kistvaen* of about 3 ft. At the back of the head was found a bone hair-pin, and chips of flint were at its head and feet. The teeth were in fine preservation.—Returning to the line of side cases were seen the Roman and Romano-British objects lately found at Brough, the station which protected the passage of the Humber, upon which an interesting paper by Mr. Huffam had been read in the section of Antiquities.—Mr. Barber, the chronicler of the discoveries at Slack, near Huddersfield, the ancient *Campodunum*, contributed some very fine specimens of Roman tiles, and other evidences of the occupation of that people.—From the Museum at Scarborough, from Ravenspurne, and other places, were shown other objects of the Roman period in great variety.

Many documents relating to Yorkshire were exhibited.—Lord Londesborough sent a portion of his valuable collection of MSS. relating to Selby Abbey. These comprised the accounts of Pitancers, Chamberlains, and other officers of the Monastery, from the reigns of Richard II. to Henry VII. These are but a small part of his lordship's stores of these things, and we should hope the light they would certainly throw upon that interesting monastery will not long continue buried.—Mr. G. Sumner, of Woodmansey, sent numerous documents. Among them were some of the original muniments of the once famous borough of Hedon, which decayed as its too powerful neighbour Kingston-upon-Hull rose into repute and wealth. Accounts of wardens of guilds and of church fabrics, rolls of assessments and deeds of all kinds, from the thirteenth century to the seventeenth, were shown by him.—Mr. Mapplebeck, of Lowgate, sent a miscellaneous collection of royal and other autographs, &c., including a licence by Napoleon to enter the service of the King of the Two Sicilies. A letter signed "Joseph Osborne," dated 22nd February, 1681, speaking of the blockhouse at Hull, at a very critical time, says: "Wee have but six gunners besides myself, and one of them hath two wooden legs, and another one wood legg." Among them was the proclamation by Charles I. in 1642, when the civil war really began, by Sir John Hotham's bold refusal to admit the King to his ancient borough of Kingstown. A letter of Ralph Thoresby, the historian, was in this group.—Mr. Sumner, Mrs. Everett Green, Mr. Carthew, Mr. Hill, and others, exhibited parcels

of family deeds and other documents relating to Hull and its vicinity; also royal and other autographs, from James I. to Victoria.

Upon the tables down the centre of the room were displayed a great variety of objects. The Earl of Yarborough contributed a fine bronze tripod pot of large size, found among the ruins of Thornton College.—The Rev. Greville Chester showed a great variety of objects of Eastern Art and jewelry, comprising a gold necklace of fine Greek work; rings and earrings of various devices and patterns; numerous engraved stones, scarabæi, and other objects; Hebrew roll of the Book of Esther, and many Roman, Greek, and other seals.—Some fine MSS., and early printed books and calendars were shown by various owners. We may note a volume of the well-known book of travels of Augustin Cassiodorus Reinius, printed at Frankfort-on-the-Main in 1597; a Nuremberg chronicle; several odd leaves of ecclesiastical MSS. of the twelfth and thirteeth centuries, redeemed from the servile occupation to which they had been consigned at the Reformation of covering some diary or churchwarden's account.

A very miscellaneous collection was grouped for convenience' sake at various parts of the museum. Of these we can only note the more remarkable. Oak panellings and carvings of lions from houses in High Street, Hull; remains of querns and other Roman objects found at Hull and Hedon; a large "dolium," about two feet in diameter, caught up by a trawler off the Goodwins; sculpture found at Walsingham, Norfolk, and casts from carvings at Beverley and Lincoln; the Bible of Andrew Marvel, with his autograph; and the like of Robert Burns (without sufficient authentication); a wooden mace of state, possibly of the time of Henry VIII.; the crest and book-plate of Poulson, the historian of Holderness; a large collection of casts of the abbatial, episcopal, and other seals of Yorkshire, and of Greek coins; a bronze ewer on a tripod, having a cover with fine grotesque face; a leathern triangular bottle, holding about two quarts, with very good floriated pattern worked in silver,—probably a saddle-bow "comforter" to some gallant cavalier; three leathern tankards of various sizes; and a fine bottle most oddly impressed with seven medallions bearing heraldic crests scattered over the surface, found in an old house in the High Street, Hull; four brass mortars used for medical purposes and of various sizes, two dated 1640 and 1653.

The pictorial department of the museum was not up to the average. One portrait of Andrew Marvel was the sole representative of the line of worthies of the East Riding of Yorkshire; and that of William Gee, founder of the Grammar School in the reign of Elizabeth, alone represented those of Hull itself. Besides these were a series of engravings of the Lord High Stewards of Hull from Sir Francis Walsingham to the present time, and many fine drawings and engravings of pictorial subjects in the neighbourhood of Hull. Among these must be specified Mr. B. R. Green's very artistic sketches of the ruined abbeys and castles in the north of England and Scotland.

In one of the cases was a good variety of pottery of various kinds. These included some rare specimens of Delft ware and imitations of Eastern China; a two-handled mug of white Dutch ware, with sharp, rough-cast exterior; one of the ordinary "sack 1650" bottles, which must have been extensively manufactured and pretty freely distributed; some small specimens of Battersea enamel; some fine plates and dishes of

various wares; an oriental milk-jug of very quaint and rich colouring in blue, green, and yellow.

The corporations of Hull and Hedon exhibited a fair collection of plate, considering how the Municipal Corporations Act affected such things. The articles were somewhat suggestive of the convivial habits of those bodies, including, as they did, fourteen silver tankards, goblets, and wine-cups of all sizes, and with most diverse kinds of ornamentation, peg-tankards, punch-bowls, rosewater dishes and ewers, and other articles of table luxury, chiefly of the seventeenth century. Conspicuous among these were the goblets presented by "Wm. Wilberforce, Mayor, 1723," the father of the great philanthropist, and two fine flagons, presented by Sir John Lister in 1740. The Corporation of the Trinity House, an institution almost coeval with the royal borough itself, possesses some of the more special articles of table luxury, and, it might be said, of table trickery. Witness the "Milkmaid," given by Sir Cecil Wray in 1726, loyally inscribed "no warming-pan"; "Tyburn to the Pretender and all his adherents," which made the wine-bibber pay the penalty of his unsteady hand; and the "Jack-in-the-box," presented by an elder brother of the House, in which a small figure rises at each potation to tap the drinker's nose. Several of these articles were impressed with the mark of the local assay office, the arms of the borough, three crowns in pale. A fine tankard was given to this Corporation by the Admiralty in the reign of William III. on the launch of the good ship Humber, of 1205 tons and 80 guns. Of course the maces and other insignia of the borough officers of Hull and Hedon were exhibited. Among these were the sword said to have been presented by Henry VIII., of which the blade was much later and the handle much earlier than that monarch; the mace called the "blood-wipe," whose appearance in an affray involved severe penalties to all concerned.

On a side table Mr. J. Chapman and others exhibited a small collection of arms and armour, comprising a fine specimen of a wheel-lock wall-piece, which may have done good service in the Civil Wars; an excellent pair of jack-boots, said to have been worn by Sir Edward Verney at the battle of Edge Hill; a remarkable specimen of a helmet specially strengthened to be worn by an assaulting party; an "attrape-col," or thief-catcher of the seventeenth century, presented by Lord Londesborough to the Royal Institution of Hull.

In conclusion we must notice a remarkable group of wooden figures in a canoe, of the rudest and earliest type, presenting some resemblance to Esquimaux work, which was found in 1836 in cleaning out a dyke in Holderness.

Archaeological Intelligence.

Mr. J. P. Morris, who is best known to archæologists through his investigations of certain cave-dwellings on the coast of Lancashire, and has also done much to preserve the vestiges of the ancient vernacular of his district, announces his Glossary of the Words and Phrases of Furness, with copious illustrative quotations, chiefly dating from the twelfth to the fifteenth centuries. The author will receive, with pleasure, any subscribers' names addressed to him, Soutergate, Ulverston.

Mr. T. H. Cole, M.A., has prepared for publication an Account of the Antiquities of Hastings and of the Battle-field, that may be acceptable to some of our readers, especially as the result of a fresh and careful examination of the localities, with the purpose of ascertaining the precise scene of the conflict, as related in the Roman de Rou, and by early chroniclers. The issue of this volume, which may be obtained from Karl Burg, St. Leonard's-on-Sea, is limited to the subscribers.

We recommend to notice the recent researches of our valued friend, Mr. R. Davies, F.S.A., regarding the York press, with annals of the production of the typographic art in the great city of the northern counties, the authors and other persons engaged in its early literature. The introduction and progress of printing in York had hitherto received very imperfect historical illustration. This memoir is published by Messrs. Nichols, Parliament Street.

A Treatise on the History of the Art of Shoeing Horses is announced by Mr. G. Fleming, F.R.G.S. The origin of the practice is involved in obscurity; it was investigated by Beckmann in his History of Inventions, about 1770; in 1831 Mr. Bracy Clark produced his Essay on the Knowledge of the Ancients respecting the Art of Shoeing the Horse; the subject, the interest of which has been recognised by antiquaries of more recent times, has been discussed by Mr. Syer Cuming, Journal Brit. Arch. Ass., vol. vi. p. 406; also in the volume for 1858, p. 273. Explorations of ancient sites in this and foreign countries has brought fresh evidence to light; the disputed use of horseshoes by the Romans has been fully discussed by Ricard in the Transactions of the Antiquaries of France. Subscribers to Mr. Fleming's work are requested to send their names to him, Royal Engineers, Chatham. The volume, price about 14*s.*, will contain 200 illustrations.

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